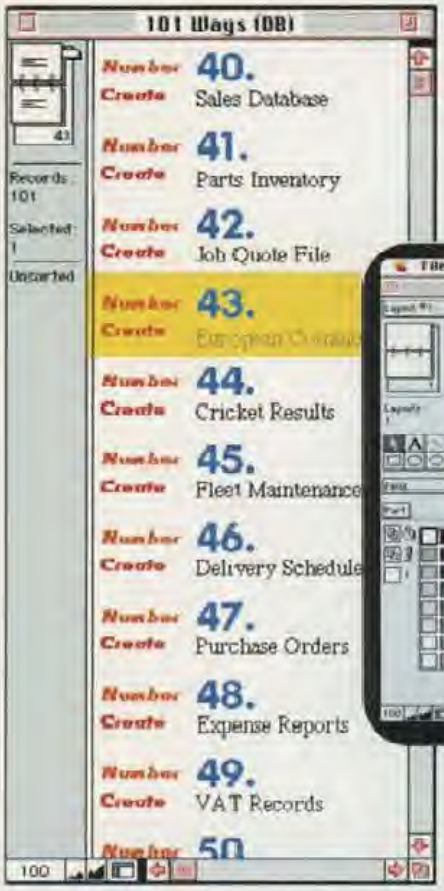
Apple2000

THE NATIONAL APPLE USERS GROUP

NOVEMBER 1992

We can think of 101 ways to use FileMaker Pro 2.0. but only one reason.

It's even better than before.



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* Prices exclude VAT and shipping.
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Apple2000

The All Apple User Group Committed to All Apple Users including Macintosh

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Apple2000 supports users of all the Apple computers. The **ITT 2020, I, II, II+, //e, //c, //c+, IIgs, IIgs+, ///, Lisa, XL, Mac 128, 512, MacPlus, Classic, Classic II, SE, SE/30, Mac LC, LC II, IIsi, IIcx, IIci, IIx, IIfx, Quadra, Portable, Performa and PowerBooks**
Contributions and articles for the magazine are always welcome. We can handle any disk size or format. Send to PO Box 3, Liverpool, L21 8PY

PLEASE NOTE
Any articles of specific interest to Apple II, Apple IIgs and Apple /// users are printed in the front half of the magazine, while those relating to the Macintosh and Lisa are at the back. Look for the page icons:

Apple II, //e and //c	
Apple ///	
Apple IIgs	
Macintosh, Lisa	
Macintosh II	

Apple2000
September 1992

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MEMBER MUG NEWS SERVICE

USER GROUP CONNECTION

There are a number of ways to contact Apple2000

If you wish to order goods or services from Apple2000 or just leave us a message, call Irene on (Ansafone during the day). Alternatively you can Fax. your order to or write to the PO Box. If you use comms you can leave orders on TABBS addressed to the SYSOP or contact us on AppleLink (BASUG.1).

If you are experiencing problems with Apple hardware or software Dave Ward and John Arnold run the Hotlines and will try and help you solve it.

We are very interested in the activities of local user groups, and if you have any information which you would like publicised John Lee would like to hear from you.

We reserve the right to publish, without prejudice, any advice or comments given to members as a result of letters received, in the journals of Apple2000.

A little praise for a few of our authors wouldn't go amiss. Send all comments, and contributions, via the PO box, especially suggestions about what you would like to see in your magazine.

Chairman's Corner

Apple2000 1980-1992

❑ It has not been an easy year for the Apple2000 committee. Since the April AGM, we have had to take some hard decisions. You will all know, of course, of the problems that the group has been facing. Many of you have kindly offered solutions to our predicament. However, the problems that Apple2000 faces are too great for a simple remedy to put us back on the right track.

It has become clear in the months following the AGM that Apple2000 can only survive if a radically new approach is taken to running the group. It is only right and proper that such a decision should be made by the members themselves at an AGM. It would be up to a new committee, formed from the membership at an AGM, to make these decisions.

As most of the membership subscriptions actually come up for renewal at the end of the year, it seemed that it was right to call the AGM earlier than usual, so that any new committee that was formed would be able to start with a clean sheet. They would then be able to decide on the future format of the group, and be able to put forward a freshly considered package to members, as the subscriptions came up for renewal.

We cannot hold an AGM in 1992, but it would double the costs if we hold an EGM in 1992 followed by an AGM in 1993. Therefore, we are extending the membership period, to allow us to hold an AGM in January (see enclosure).

There will need to be a fresh committee formed to carry Apple2000 forward. Some of the existing committee will not be standing for re-election this time round, which means that the membership must put themselves forward for election as committee members so a new committee can be formed. This is a plea that I make every year, but judging from the usual response it seems to fall on deaf ears.

In many of the letters we have had from members over the last few months, we have been told "Please do not let Apple2000 die!" May I remind members that Apple2000 is not run by employees, it is run by volunteers from the membership itself. It is for the membership to see that Apple2000 does not die by coming forward to join the committee. They must participate and stand for election so that a committee with fresh ideas and new energy can see a way forward in the current predicament.

I feel there needs to be fresh thoughts about how a User Group should be structured and how it can survive in the highly competitive world of computing. I have been pleased to see that there have been three successful attempts at starting Apple II User Groups in the last few months. These are, in my opinion, one of the positive ways forward. They cater on a more personal level for the needs of specific machines. You will find contact names and addresses on Page 15. Most of those running these groups can also be contacted on TABBS.

TABBS and the Liverpool UK Bulletin Board are going to become more and more important as contact points and for information exchange as time goes on. These are cost-effective ways of communicating between Apple enthusiasts. Please support them if you have a modem.

❑ Apple Inc. is a changed animal from the friendly manufacturer many of us fondly remember. With new models of Macintosh only having a life span of a few months, and in one case of a few days, it is not surprising that they see no reason to support Apple II computers which may be anything up to 14 years old.

Apple are also now aggressively marketing the low end computers in the High Street. There is even talk of them being available mail order sometime next year. This is very different from the days of the caring dealer who was able to answer all your questions and deal with all your problems. These dealers still exists of course, but the pressure is on them to increase sales. This can only lead to poorer service and support. I hope that 1993 does not turn out to be the year the dealers we know and respect faced the fate of many small businesses of 1992.

❑ We shall soon see the launch of the Newton PDA. This is such a new direction that it is really an unknown quantity for most of us. I have heard people say that it will never come to anything and is not what people need. May I remind you that it is only some fourteen years since the time when a micro-computer was a rather special and expensive animal, that was only used by computer buffs, and was seen by many as a curiosity. Shall we wonder in another fourteen years how we ever managed without our PDA's and dockable NoteBooks?

Ewen Wannop

The Editorial team is:

Apple II	Ewen Wannop
Macintosh	Norah Arnold, Irene Flaxman
Reviews	Elizabeth Littlewood

Many thanks to all those who work behind the scenes and who receive no personal credit. These people are the stalwarts of Apple2000.
Additional thanks go to Val Evans for designing our front cover, and to Walter Lewis of Old Roan Press (051-227-4818) for our printing service.

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Letter Box

Pagham
West Sussex

Dear Apple 2000,

I have been thinking about buying an FPU for my Mac LC 4/40. It says somewhere with the information that came with my computer that the LC cannot be upgraded to contain one, but I have seen LC PFUs advertised in several places, so which is the best one to get? The prices vary from £67 to £180. Does the FPU accelerate graphics, for example when when scrolling windows or when MacDraw Pro shades objects?

I am thinking about buying Disk Doubler or AutoDoubler, but none of the adverts mention its effect on the speed of loading and saving files, except in comparison with similar programs. Am I correct in understanding that it automatically compacts files when saving them and expands them when you access them? Is this a good way of getting around the filled hard disk problem ? What is the difference between the two.

I have MacWrite II (and a free upgrade to Pro), and cannot get pictures to fit next to writing with more than one line of text to the side of it. For example, I cannot get a picture on the opposite side to the address on my letter stationary file. Can it be done, or do I have to wait until MacWrite Pro is released ?

The mouse that came with my LC is slightly different from the IIGS mouse, for example the ball is lighter. Unlike my old GS mouse this one sticks quite often. Do all Mac mice do this, and if not should I try to get Apple to replace it. If they do normally stick, I am considering getting a trackball such as the Kensington Turbo mouse, but are they easier or harder to use than a mouse ? I have always imagined that it would be quite awkward using one, particularly when dragging things or selecting things from the menu bar.

On the HyperCard stack listing all of the files available in the Apple 2000 library there are two medical disks containing digitised pictures for a program called FileVision. What is FileVision, is it PD, if not how much is it and where can I get it from ?

J. Shippam.

❑ FPU's can indeed be fitted to an LC. They can also be fitted to a IIsi. There are quite a few on the market, but as they all use the same arithmetic processor, the only choice is in how much you want to pay. They only speed up programs that use the SANE floating point package routines. You will see little benefit on a word processor for instance, but most graphics drawing programs like FreeHand or Illustrator will benefit. Pixel draw paint programs are unlikely to show improvement. If you are considering speeding up your LC, have you considered an accelerator? These things really do speed up the whole machine. In many cases the accelerated LC can outperform the Mac II range!

You are correct that the AutoDoubler will compress and expand files as you use them. But I do not think this is a good way of getting round a filled hard disk. It is cheaper to buy a second hard disk than to pay for the recovery of data you could possibly lose from a disk crash.

Most informed opinion warns you about the dangers of using a program such as Disk Doubler or AutoDoubler. If you consign your important files to a compressed format used 'on the fly', be aware that any disk crashes might leave you with no data at all as your file may be only partly compressed. To be fair, these programs say that data can be recovered from such a situation. Use compression programs for archival storage, but be wary of using them for other purposes.

I see you mention that elusive program MacWrite Pro! I think a prize should be awarded to the first sighting of this promised piece of software! It is now more than a year from the launch. Pictures imported into MacWrite II are treated as a piece of text. They take up one line space with the line being the height of the picture. You cannot therefore get more than one line to its left or right. Have you tried setting two columns, and putting the picture into one of the columns? MacWrite Pro promises us it will allow us to place pictures anywhere. In the meantime you would need a DTP program such as PageMaker to do this.

All mice are now the same with the new plastic ball. Those of us lucky enough to have one of the old steel ball mice guard it jealously. These were issued with the earlier Mac's but was quickly replaced with the new lightweight one. Sticky balls on mice are usually the result of using it on a surface that has either been polished or has picked up grease from the hand. The solution is to take the ball out and wash it with washing up liquid! At the same time make sure that the small wheels inside are free from dirt.

Personally I have never got on with trackballs, but then thousands of Mac portable and PowerBook users are quite happy with them. You would need to try one out for yourself to see if you can use it.

FileVision is a commercial program and not Public Domain so you would need to check with your local dealer if they can get it for you and what price it would be.

Editor

Bettyhill.
Sutherland

Dear Irene,

After my 'phone call I thought I'd better write and explain the tip regarding Claris Works spelling checker.

As it stands the Claris Works spelling checker has a main dictionary and a User dictionary. The User dictionary can be accessed via the EDIT menu. However when adding abbreviations like O.T. or N.T. or B.D. or a.m. (p.m. is in the main dictionary!) it omits the final period - it doesn't like punctuation at the end of an entry. My solution was to take a copy of my User Dictionary containing the incomplete abbreviations on a floppy disc to the local school and borrow a machine with MacWrite 2 installed. Then using the MacWrite 2 spelling checker to view my User Dictionary I was able to delete the incomplete entries like a.m and then add the required a.m.editing doesn't work - you must delete then add! When using the modified User Dictionary at home with Claris Works - it all worked perfectly!

Regarding Converting HyperCard 2.1 in the October

'91 Apple2000 magazine - fine. With the cut down version I received there were no apparent buttons on the first card of the Home Stack to allow me to go to other cards of the Home stack. And so the preferences card could only be accessed via the GO menu. The arrow buttons are there however, and already have the "script" written - they can be revealed using the following steps:

set. userLevel to 5 as in the article
Select the button tool
This reveals button covers in the lower corners of the card
Select the left button
The "Button info" from the objects menu identifies this as background button I.D. 247
Click O.K. - then delete
Use a similar procedure to remove the cover on the right hand side - this time the I.D. is 248

Select the browse tool, and you can now use the Home Stack with ease.
John Lincoln

Bettyhill.
Sutherland

Dear Irene,

In my last letter I dropped a clanger - I didn't check carefully enough! The final period in abbreviations can be inserted into the User Dictionary completely within ClarisWorks.

As it stands the ClarisWorks spelling checker has a Main Dictionary and a User Dictionary. However when adding abbreviations like O.T. or N.T. or B.D. or a.m. (p.m. is in the main dictionary!) it omits the final period when operating in "LEARN" mode - it doesn't like punctuation at the end of an entry.

By accessing the User Dictionary via the "EDIT" menu - go to SPELLING and then User Dictionary in the submenu, the abbreviations requiring a final period can be corrected.

The incomplete entry must be selected using the mouse and a single click - and then the entry deleted using the "REMOVE" button. The abbreviation in the entry box can then be edited, with a single click in the "ENTRY" box to remove the highlight and the final period entered from the keyboard. It can then be put back in the User Dictionary with the "ADD" button.

It can't be edited simply as the programme responds with a dialogue box saying the word is already in the Dictionary.

Using this method I am able to delete incomplete entries like a.m and then add the required a.m. I can now have all the abbreviations I like - the spelling checker now accepts and corrects them, adding the final period if necessary:

O.T. for Old Testament
Gen. for Genesis
B.Sc. and any other academic designations in my correspondence ... etc.

The only time I had to press "Skip" for this letter was for the a.m. without the final period and for the post codes which I hadn't asked the checker to 'Learn".

Sorry about my carelessness - still the note might be of use to someone.
John Lincoln

Largs
Ayrshire

Dear Sir,

Thank you for printing, in Apple 2000, April 1992, page 4, my fax regarding the problems I am having with the HP DeskWriter C printer.

Ewen Wannop also telephoned me regarding the above and may be interested in the following :

I have since received, from Hewlett Packard, the latest version of the DeskWriter C driver, version 2.0. The new version enables background printing but does not solve the problems I am having printing from ScanMan 2.1 and Digital Darkroom 2.0.

I have written to Hewlett Packard at their Corvallis address in Oregon. I am now going to fax their address in Bracknel.

Many thanks for your excellent magazine, Apple 2000. I hope it continues for many years to come.
I.G. Dalgleish

[redacted]

Dear A2000,

I would first like to thank those people that have written to me and by now they should have received a reply.

In the last issue of the magazine some requests for help were seen, well here goes for some of the answers.

Q) Can I draw lines and therefore make forms on a][c?
A) Yes I think you can, there is an add-on from Beagle Bros which allows you to do just that, it is called Superforms and is probably available from your not too local friendly Apple][software seller, whose advert may appear in this issue somewhere.

To quote from the advert, " With Superforms you can graphically design your form right on the screen, so you know what your form will look like in print. Quickly design answer sheets, invoices, order forms.... ....formfill will allow you to fill in your forms with info transferred from a database, spreadsheet or word processor."

The program requires AppleWorks 3 and SuperFonts.

All in all, assuming you are using AppleWorks 3, the cost will be about 120 dollars and you can keep on using the][c.

I have used some Timeout stuff and found it to be good quality but I am only relaying Brochure stuff as these are two programs I have not used. The English price may be obtained from the Advertiser referred to above.

Q) Can you recommend a Statistical Program?
A) Yes I can. It is called APPSTATS and GRAPHS and is on 5.25 discs in ProDOS. It is written in Basic and it does:

T-tests, Correlation, ANOVA, Crosstabulations, Spearman R correlation, Multiple regression, Means, Standard Deviation and Chi things as well as non-parametric statistics. The graphs bit does nice graphs on data typed in, worked out in APPSTATS or created on AppleWorks.

The publisher that I know of is STATSOFT, 2325 East 13th Street, Tulsa, Oklahoma, 74104. But the London ? phone

number is [illegible] [Potters Bar / Welwyn Garden City]

I bought this program about 3 years ago and have found great use for it.

As Mr Irvine was one of the people who contacted me I have sent the advert for this program to him when I replied. This is meant to nudge you unknown Apple][users into contacting me so knowledge like this will not be lost.

Alan Armstrong

Reepham
Lincoln

Dear Irene

Reading the latest copy of the magazine it seems that the group is on the verge of folding up. Maybe as far as cost cutting is concerned, the group could do away with the magazine but retain the Apple Slices to keep in touch.

As far as I am concerned the help I have received from your good self and others has been excellent. As far as I am aware there is no local Apple group in this area, and I do not know of any other Apple II users in Lincoln or the surrounding villages. My wife and I came to Lincoln from Leeds at the bidding of my son when I retired. Now that is interests are overseas it is more than likely that some time in the future we shall be returning to our hometown, and according to some of my friends, there are quite a few Apple users, so we shall see what happens then.

Harold Bennett

❑ We have had many suggestions as to how we could cut costs. Only printing Apple Slices is one of the many. Most of the questionnaires said they would not rejoin if there were not a magazine. We did not specify between the magazine and Slices in the questionnaire, but I suspect that many of the membership would not renew if Slices were the only thing we published. There are many other problems to address. The last few months have clarified some of them. It will be up to the membership at the AGM to find a solution.

Ewen Wannop

[illegible]
Worcester,

Dear Irene,

Thank you for your letter of July 28th and the Apple 2000 Membership Pack.

I have read the Chairman's Corner and Apple2000 Crisis and it does seem that the future is a little doubtful. I only wish that I could offer practical help or useful contributions to the magazine but having reached the legendary three score years and ten and being new to computers, my learning rate is not as quick as that of the younger generation. Thus I am more in need of help than being able to offer it, which is why I hope that Apple2000 survives.

I'm a liar - I can offer a contribution to the next issue; one more to the list of Radio Amateurs:-

Ellis James-Robertson - G4ELL

You may notice the fortunate choice of the final three letters of the call sign as first names are always used on the air.

Here's hoping that Apple 2000 continues.

R Ellis James-Robertson

Gilling East,
York

Dear Apple 2000,

I was sorry to learn of the extreme difficulties you are experiencing. I have always found the magazine of absorbing interest even though I don't understand the half of what is in it and have never played a computer game in the whole of my life. I use my GS almost entirely for business and a bit of general correspondence.

I noticed browsing through the Mac end of things an article about analysing one's bank account. If it is of any interest to anyone, I have been doing something like this on AppleWorks for several years using the database and producing a complete set of accounts for a farm and also for a holiday cottage letting business.

It was with a real pang that I learned there would be no more yellow kit from Cirtech.

I hope that I will be using my GS for a little while yet.

R.J.Kelsey

Chesham
Bucks

Dear Ewen

It may eventuate that Apple2000 comes to an end and I have no wish to exacerbate or give credence to any mere panic. However I cannot let the occasion go past without thanking you for your help with our Mac LC query, and especially Dave Ward for his help with our GS over the past six or so years. I have also recently received help from John Richey with AppleWorks. Thank you all individually, and the whole team for running such an excellent and supportive club.

Our problems have been non-technical and that is the support we have sought from the club. It is good to read from Alan Armstrong that he is prepared to help new users no matter how basic their problem - but our family couldn't 'do our bit' in return in a proposed collation of groups of people to help each other with problems because we are not technical, and while the 'drinks in pubs' sounds attractive we wouldn't be technical enough to understand the conversation, let alone contribute much, and anyway the children are still under-age.

Quentin Reidford would disapprove of our using 'others simply passing on hard earned knowledge.' I have offered to contribute the club on two occasions in a word processing or graphic, layout capacity and been politely refused.

To extend Adrien Youell's analogy, the days of repairing and tweaking your own car are gone and this is now the case with the computer. People like us just have to sigh and fork out for the latest product just as earlier car owners did. Thus we own a Mac LC although I can rarely prize the kids off it so still use the][GS. We are now saving for the wonderful new amalgamated product between Apple and IBM and my next expectation is dictating orally direct to the word processor - hope so for their teacher's sake as my children have resisted any effort of mine to teach them to type.

Good luck and I hope the rumours are unfounded.

Merrin Molesworth

❑ Thank you for all the kind words. Apple2000 has survived for a long time on such letters of thanks. It makes it all worthwhile when we hear that our efforts have been appreciated.

Ewen Wannop

Bishopstone
East Sussex

Dear Sir,

Your readers may find the following of help or of interest. I have an Apple IIGS, one 3.5 Apple Drive, daisy chained AMR 3.5 drive, 4 Meg Ramcard, Syquest 44Meg Hard drive. I bought a package from Roger Wagner Hyperstudio 3.1 update and with a complete set of System 6.0 disks.

I installed the complete System 6.0 on the hard disk, then installed the complete HyperStudio.

I noticed when I selected a program either with Prosel 16 or from the Finder, the system hung with a faint glow of the red light on the empty AMR drive, solved by inserting a disk (I remembered that one, although no problems with System 5!).

When I ran the Sound Studio and recorded, lock up occurred. I wrote to Roger Wagner (not in person), they advised that I keep out of the system accessory a file called 'Easyaccess' they are aware of it and are working on a fix. This has fixed the bug for me.

This has also fixed the bug in 'Quickie' that occurred with System 6.0 only that would not accept RETURN after scanning, I had to wait for Timeout.

David Pearce

❑ There are a few problems that can arise with System 6.0 such as this. Most are due to the constant polling of drives that are not 'smart'. The polling is needed to see if a disk has been changed or removed. The AMR drive is not seen in the same way as an Apple one. A 5.25 drive also falls into this category. If you are having problems with 5.25 drives polling in the Finder, you can turn this off in the Preferences dialog. Most of the minor problems that people had when System 6.0 first appeared seem to have been overcome. It is proving to be a powerful and much improved system. It does need at least 1.5Mb to run comfortably however.

Editor

Fakenham
Norfolk

Dear Sir,

I have an Apple ///, and a 5Mb "Profile" hard drive but hardly any software to go with it!

I have attempted (many times) to use the Apple "Business Basic" supplied on the machine's demo disks by interrupting the loading of the programs by whipping the disk out of the drive to force an I/O error. I hoped that this technique would allow me to write a few basic programs but I have been attempting to write a terminal program for use with a TNC modem only to discover that this basic will not allow the user to determine if any data has arrived on the RS232 input. If I try to use the "Input #1" or "Get #1" commands, the machine just hangs until an input character arrives. You may appreciate how infuriating this could be if every time you wanted to send a command you'd have to wait for a response from the remote machine!

Of course this simple problem could be overcome by repeatedly examining the first byte of the input buffer - but Apple, in their wisdom, have deemed it unnecessary to include machine oriented commands, "poke", "peek" and "usr". Thus it is not possible to examine memory locations easily - besides the job would be complicated in that I don't have a memory map for the Apple ///.

I joined Apple2000 in the hope that I might find a supplier of software and documentation, but since December last, there has not been a single article on or concerning the Apple ///, it almost seems a waste of £30 to join particularly after the most enthusiastic letter encouraging me to join. When I did, I was sent a number of disks - which I had asked for in Apple /// format but appeared in part in Apple II format but I could only use the Apple II emulator disk. When I tried them, the ProDOS disk started printing to the screen in some form of scrambled ASCII rendering all the text illegible as it was now mainly composed of slashes & asterisks! I thought I might fare better with the Apple /// disks but only one could be read by the machine - and this contained text files requiring assembly on an assembler I did not have.

One might be led to believe that my machine was faulty, but I experienced no difficulty before using the SOS disks.

As a final request, I wonder if you could search your files of the members of this user group to see if anyone else has an Apple ///. Perhaps I could get a language from them, at least, a few basic programs may be used to determine the syntax of the more usual commands.

Tears - of desperation's End,

Simon Clifford

❑ Oh dear, what a tale of woe. We have always said that we support Apple /// machines, but of course this is dependent on there being members who also have one and have the knowledge to pass on. So few are still being used that we simply get no material being contributed to the magazine except in very rare cases. We have little software for it because very little has been written. Even less is available from dealers. The most that can normally be done with the /// is to run it in Apple II emulation and run whatever software will actually work with it.

We cannot give you names and addresses from our database as we must respect the Data Protection Act which we are a party to. All I can ask is for any member who may have any knowledge of the /// that could help Simon, to write to use and we shall pass the information on to him.

The problem you have reading disks could be just due to an alignment fault. If a disk drive is out of alignment it will be able to read its own disks, but may have difficulty with those from another disk drive. If you have two drives, try swapping the drives and see if that helps. ProDOS and SOS disks are identical in their formatting. The only difference you will see is that ProDOS disks can have sub-directories and will also usually have files with a different file-type to SOS.

I would suggest that trying to write a terminal program from Basic just will not work. Basic on any Apple II or /// machine is just too slow to be able to keep up with data at any sensible speed. All communications or terminal programs use machine code routines to collect and send data to the port. This is the only way it can be guaranteed that you will not lose data. It is also usual to use the interrupts to trap incoming data into a circular buffer. The data is then 'pulled out' of the buffer from the program when it can. Basic can be used for that purpose but would still be very slow when you consider you must do something with the data you have captured. Apple in their own way of doing things chose not to activate the interrupt line on the Apple ///. You would need to write the entire program in machine code if you were to have any success. Apple did write a version of their own Access II (Access ///), perhaps someone has a copy they could give you.

Have you tried using AppleSoft from an Apple II system disk booted through the Emulation disk. This would at least give you most of the commands you may be used to. The peek/poke address map may not of course be the same as the Apple II.

It appears as though they just do not want you to go peeking about in the memory. The lack of Peek and Poke points to that.

Ewen Wannop

From: Colin C. Rogers, 100063,2455
To: Apple2000, 76004,3333
Date: Thu, Jul 30, 1992, 3:48 pm
Subject: Connecting a Mac plus to a Modem.

Dear Sirs,

I am contacting you in the hope you might be able to help me with a quite simple query. To me it is a bit of a hurdle but someone somewhere has the simple answer.

Basically I want to shift files from a Mac Plus (1986 vintage) to the PC. Its a case really of GOT TO rather than want to. Let's not dwell on the politics of the situation.

The way I plan to tackle this is via a modem and we have on that works (a Tandata TM7512) and its got an RS232 port. From somewhere I have got a cable with the Mac "mini 8-pin Din" plug on on end and a 25-pin D connector on the other.

The problem I have right now is the cable appears to be faulty. Three different Comms progs draw me to that conclusion: whether the Modem is connected at all, to the phone port or to the printer socket the error message says "Modem not connected".

So what I am looking for is information about the "pin-outs" for the two connectors to check the wiring. Does anybody have the answer to this simple request?

Perhaps someone in A-2000 knows somebody who may be able to help me anyway with this task of transfering files from a Mac to a PC. My works phone number is 0934 522244.

You may be wondering how I am connected to C-serve: from my PC, simple, but I'd like to be able to do it with the Mac preferably.

Colin Rogers

❑ Well. Colin, the answer is probably much simpler than you thought.

There are two kinds of cables that have a min-8 plug at one end and a 25-way D plug at the other. One is a modem cable and the other is a printer cable. They look identical, but differ in the wiring. I suspect that what you have is a printer cable. This is most likely when your three comms programs all reported 'No Modem connected'. To connect to the modem you will need to get a modem cable which would be correctly wired to connect to the modem. We can supply one of these from the Apple2000 shop.

However, if you want to connect to a PC there is no need to use a modem if you can get the two machines to within a few feet of each other. Just connect a 'null modem' cable between the two ports and you will be able to connect and talk to each other. A null modem cable is simply a cable that has the sense of the send and receive data connections reversed. A printer cable is in fact just that! If you connect the 25-way D plug on your 'faulty' cable to your PC serial port, I suspect that you will have direct contact. You may have to sort out a gender changer if both plugs turn out to have the same gender.

Normally with a serial port having 25 way connectors, you just wire directly pin for pin for a modem. A ribbon cable and two IDC connectors are ideal to do this. The Mac confuses things by using the mini-8 connector!

I hope that solves your problem.

Ewen Wannop

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New Quantum 105 meg hard drives, low power, 1" high. Internal £230.00 External ready to use with all cables, etc., 2 year warranty £310.00 Apple II requires additional SCSI interface card, from £75.00 Other drives available new and used from approximately £1.10 per megabyte subject to make, model and size (the biggest are cheapest) and availability. 90 day warranty on used drives, manufacturer's warranty on new drives (typically 2 to 5 years).

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AppleXtras

❑ As these may well be the last AppleXtras disks to be published by Apple2000, and as it is not clear if there will be any further magazines this year, we are issuing the remaining three disks of Volume 3 with this issue of the magazine.

It has not been possible to give the usual brief descriptions of the files due to the limited space available in this issue. You will however find the usual rich crop of Public Domain and Shareware software on these disks.

On Xtras.P8.No.18 is the recently released Public Domain version of the famous AppleWriter II word processor by Paul Lutus. This is a very powerful and well known program, much loved by those who still use it. You will find it under the AW21.BXY.

As usual most of the programs have been shrunk using ShrinkIt. The latest IIgs version of ShrinkIt can be found as an EXEc file on Xtras.GS.No.18.

/Xtras.GS.No.16/=

```
Games              DIR =  2        512
   2 Fun.Columns.SHK LIB          9759
   2 FLY.BXY         BIN        123008
   2 HELMET.BXY      BIN        296064
   2 MAH.BXY         BIN        154240
   2 Galactic.SHK    LIB        137255
```

/Xtras.GS.No.17/=

```
Entertainment    DIR =  2        512
   2 VIDEO.BXY       BIN         85504
   2 Floor.Tiles     LIB         11535
   2 BOMB.BXY        BIN         12800
   2 AUDIOZ.BXY      BIN         72192
   2 SONIQT.BXY      BIN         59136
   2 SS.CHICAGO.SHK  LIB         58484
ModZap           DIR >  3        512
   3 MZDEAD.BXY      BIN         49280
   3 MODZAP.BXY      BIN         18176
   3 MODZAP.TXT      BIN          1968
   3 MZBASS.BXY      BIN         58880
   3 MZYEAH.BXY      BIN         82432
   2 Landmine.Game   LIB         26879
Utilities        DIR <  4        512
   4 DTUTIL.BXY      BIN         81664
   4 FNDRSNDR.SHK    LIB          3712
   4 RSOUND.BXY      BIN         24192
   4 SYNTHINIT.SHK   LIB          5306
   4 SNDPATCH.SHK    LIB          2082
   4 ANSITE.BXY      BIN         58624
```

/Xtras.GS.No.18/=

```
System.Folder    DIR =  2        1536
   2 IR20.BXY        BIN        127360
   2 IM2.SHK         LIB         16358
   2 FVIEW3.BXY      BIN         40192
   2 FTRIX.BXY       BIN         26752
   2 FNDA.BXY        BIN         35072
   2 FILEMGR2.01.SHK LIB         56144
   2 FAMOD2.BXY      UNK         15744
   2 EXTKEY.BXY      BIN          3840
   2 DTRACK.BXY      BIN         15744
   2 CLOCK.SHK       LIB         11722
   2 CHECK.SHK       LIB          6085
   2 CDEV.BXY        BIN          9728
   2 QuickLaunch.BXY LIB         12160
   2 MI.BXY          BIN         18176
   2 SCARAB.SHK      LIB          4466
   2 YACNDA.BXY      UNK          8320
   2 SUPERZIP.SHK    LIB          9210
   2 TR.BXY          BIN         18304
   2 NOINTCRS.SHK    LIB          4581
   2 LURK.BXY        BIN         17408
   2 KEYFIN.BXY      BIN         20480
   2 KB.SHK          LIB          3878
   2 HK.SHK          LIB          8311
   2 gscii2.3.1.SHK  LIB         62285
   T GSHK.EXE        TXT        166912
```

/Xtras.P8.No.16a/=

```
T AGAT69.BXY      BIN        35584
T ClockChp.SHK    LIB        27887
T COLUMNS.IIE.SHK LIB        28895
T CountDays.SHK   LIB         6565
T ENCODE.BXY      BIN        29440
T ANAGRA.TXT      BIN         2130
```

/Xtras.P8.No.16b/=

```
T DIVCPY.BXY      BIN        85632
T SF.GET.SHK      LIB         8056
T STARTR.BXY      BIN         3712
T SLOTSC.BXY      BIN         9984
T SCMM.BXY        BIN         8576
T SANE.ITY        BAS         2913
T PRDSPT.BXY      UNK         8064
```

/Xtras.P8.No.17a/=

```
T segpr.bxy       LIB        46720
T segpr2.bxy      LIB         7680
T STKR.START.SHK  LIB        52894
T ProDOS.Versions TXT        12428
T NICON.BXY       BIN         3840
T MSDOS.BXY       BIN         5760
T PAGE.2          BAS          688
```

/Xtras.P8.No.17b/=

```
T STKR.PROGS.SHK  LIB        86588
T STKR.DATA.SHK   LIB        14130
T PCTCOM.BXY      BIN        18048
T QUITTO.BXY      BIN         8832
T P8PATC.BXY      BIN         1280
```

/Xtras.P8.No.18a/=

```
T AW21.BXY        BIN        77696
T FRAC2E.BNY      BIN        51584
T Girard.Patch    BAS         1304
T NSCFIX.BXY      BIN         2432
```

/Xtras.P8.No.18b/=

```
T HFSLINK.6.SHK   LIB        18356
T column.bxy      LIB        48000
T HPDJET.BXY      BIN        14208
T FMTRAM.BXY      BIN         6912
T Jewish.Holidays LIB        45735
```

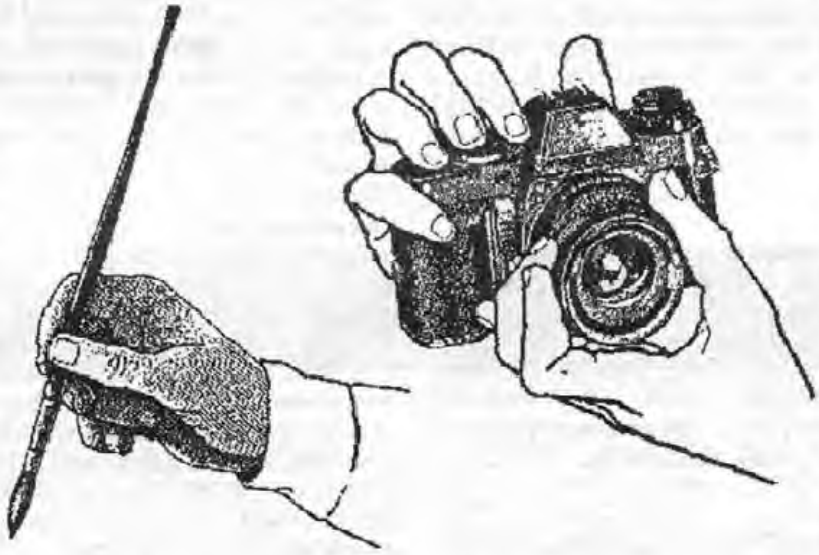
DB Pix

Peter Stark explores the display of graphics within the AppleWorks 3.0 database

Introduction

DB Pix is a new product from JEM Software which modifies the AppleWorks 3.0 data base so that you can view double hires, single hires, or PrintShop graphics without leaving the data base. It is compatible with TimeOut UltraMacros, other TimeOut applications, TotalControl 2.0, and DoubleData 2.0 (but not with earlier versions of DoubleData). If you have a colour monitor, single hires graphics are shown in colour, but double hires or PrintShop graphics appear in black and white.

DB Pix is supplied on a non-protected 5.25" disk, which also contains the necessary instructions (in an AppleWorks word processor file, DB.PIX.DOCS) as well as a small data base file provided for tutorial purposes. In addition, the disk includes a demo. version of JEM Software's TotalControl.



Installation

Installation of DB Pix is admirably simple, and clear instructions are given in the DB.PIX.DOCS file. The process creates a special new file (SEG.DP) as well as an 'init' (I.DB.PIX), the latter being placed in a sub-directory named AW.INITS. (The DB Pix installation program can also be used to install version 3.x of the 'init manager', if necessary). In case you have not come across AppleWorks inits before, I should explain that these are programs which are brought into action while AppleWorks 3.0 is being booted. Some of them change certain AppleWorks commands, whereas others perform special startup functions. For example, the I.DB.PIX init causes DB Pix to be pre-loaded when AppleWorks is set to pre-load the database. In the AppleWorks field, inits are a relatively new development, but it is clear that they will be of increasing importance and variety.

Operation

DB Pix is very simple to use. With a data base record displayed, you just place the cursor on a category containing the name of a graphic (double hires, single hires, or PrintShop) and press Open Apple-B to view the graphic. The graphic may either be in the same directory as the current data base file, or else it may be in another on-line volume. In the latter case, the category must contain the full pathname of the graphic. If the graphic is double hires or single hires, it appears as a full screen picture when Open Apple-B is pressed. However, if it is a PrintShop graphic, it is shown on screen in the bottom right-hand corner of an image of the current record, i.e. both the PrintShop graphic and the relevant data base data are seen simultaneously. In either case, the image can be inverted by pressing the space bar (or if ",i" is added to the end of the filename as shown in the category). The advantage of using complete pathnames is that you can access graphics from disks other than the one from which the data base file was loaded.

Other points

As the DB.PIX.DOCS file explains, PrintShop GS graphics files are only supported by DB Pix if they are 5 blocks long (and New PrintShop graphics only if 3 blocks long). If you wish to use normal PrintShop graphics files, you must first convert them into ProDOS format, as the AppleWorks/DB Pix combination will not recognise files on the original DOS 3.3 disks.

DB Pix also supports the graphics clipboard used by TimeOut Paint and Graph. The DB.PIX.DOCS file explains how to view this clipboard, using DB Pix, as well as how to copy the current double hires screen image to it so that the picture can be modified (with Paint) and/or printed (via Graph or SuperFonts).

Overall comments

I found DB Pix very simple to use; it works well, and I have had no difficulties with it. The new facilities which DB Pix provides are a significant addition to the wide variety of useful possibilities that exist with suitably enhanced AppleWorks 3.0. With imagination, many uses can be visualised, particularly now that scanners are available which make it easy to create suitable graphics files from printed pictures.

Peter Stark

Product: DB Pix
Publisher: JEM Software
Available from:
JEM Software
7578 Lamar Ct.
Arvada, CO 8003, U.S.A.
or: Kingswood Micro Software
2018 Oak Dew Drive
San Antonio, Texas 78232, U.S.A.
Price: Approx $25 + shipping costs

Value for money:
Performance:
Documentation:

information

Handwriting Analayst

Geoffrey Jago examines a program which analyses handwriting

This intriguing program devoted to an intriguing subject works by asking you up to sixty questions about a subject's handwriting (shapes, sizes, slopes and so on) and produces a report on his or her character. An inherent scepticism, born of a scientific career, colours my approach to disciplines such as these. This was my thought when, trying to move some way towards being as objective as humans think they are, I read the essential bits of the instruction book and booted up. I found the program very easy to use and it has yet to evince one descriptive adjective normally associated with new concepts. If you want to learn graphology this program must be one of the best routes, and one of the most interesting. Without formal training, and within three quarters of an hour, you will obtain an analysis of one person's personality from handwriting and you are likely to become absorbed in the subject.

The Apple II Edition

The edition I had for review was for the Apple II series, using good ol' reliable DOS 3.3, but the program is available for the Mac also.

The double-sided disc is not copy-protected and in fact, to run it, you must copy each side separately to notched discs. This is because the program disc, having no notches, will not accept the necessary data saves during operation. It will run with either one or two disc drives.

Excellent Instructions

The excellent ring-bound 96-page Instruction Book is nicely printed, well written in clear English and (thankfully avoiding the over-chatty style of west coast USA) concise without omitting essentials. It lacks an index but, owing to its logical layout, this does not seem to be a major omission. The first chapter, in just over one page of text, quickly gives you a foundation in the subject. A chapter deals with the history of graphology and another explains in some detail how all the traits and strokes are interpreted. A comprehensive glossary of terms is included, and appendices to the book and program give illustrations of the writing and the resulting character analysis of several American personalities including a name that sounds familiar somehow, R. Reagan. For those wishing to delve the subject to even greater depth, a list of (mostly American) books on graphology is included, together with the names of world-wide graphological organisations. A transparent gauge helps to assess slopes of strokes, proportions of letters and so on. You examine a signature or a few lines of handwriting or both and all methods are very well explained. Signatures, being quickly assessed, are fun for parties. The programmers claim that signatures show what a subject wishes to present to the world while normal writing reveals one's true personality.

On booting up, a graphic appears over which the title is written out as by a ghostly pen. After a few simple preliminaries the main menu allows you to choose between:

1. Instructions
2. Enter a Text Sample
3. Enter a Signature
4. Produce a Quick Report
5. Produce a Detailed Report
6. Save the Writer's Answers
7. Retrieve the Writer's Answers
8. Clear Memory
9. Stop

Armed with both a text sample and a signature I was led through section 2 and then section 3, turning the pages of the book as the questions were answered.

Close questioning

The questions about the subject's letters are presented in "multiple choice" form. When in doubt you are advised to skip a particular question. My first try was completed in half an hour, more quickly and easily than I expected, partly because the answers are accepted without resort to the Return key. This method is very friendly to use because the program makes it easy to go back to correct mistakes, and the Escape key will bring you home to the menu at any time. The instruction book follows you through, in the same order of questions, giving four to seven examples of handwriting for each question which illustrate clearly what to look for. At any stage the book's instructions, without the graphics, can also be called up as help-screens by pressing H.

When the time comes for the results to be written out you can choose between either a detailed or a short ("quick") form. Both contain the same basic information but the longer report explains things more fully, running to between one and two thousand words. The subject's character is analysed under the six sections: Physical & Material Drives, Emotional Characteristics, Intellectual Style, Personality Traits, Social Behaviour and Vocational Implications. In cases where both a text sample and a signature have been analysed, relevant sections of the report print two analyses (text and signature) side by side so that each section of each topic can be compared. The program points out that these do not always agree.

Reports can be dumped to a printer, displayed only on screen or saved to one of the discs as a DOS 3.3 ASCII text file from which it can be read and modified by a word processor. Saving to disc seems to take a long time because the disc spins while the program is thinking, so one must not be deluded into thinking that a hang-up has occurred. For ProDos word processors such as AppleWorks you use the normal DOS 3.3 to ProDos conversion techniques. If your ProDos WP doesn't have a converter, I recommend Ewen Wannop's excellent "Chameleon" utility.

Sets of answers can also be saved to disc as a special "writer's file", readable only by the program, which allows you to recover earlier inputs, modify the answers if necessary, and enable a new report. I should have welcomed a CATALOG facility here to remind me of file names.

A sample report

And so to the reports, which make interesting reading. A short extract is shown on the next page.

A friend, not knowing anything of the program's ori-

"She is sophisticated and has good taste. She has the potential to be a good administrator. She is highly enthusiastic. She has alternating goal expectations, so confidence in her ability to reach her objectives may fluctuate. She goes after what she wants in a direct, focused manner. She takes pride in her performance. There is a difference between her public image (her signature) and the way she really is (her text sample).

Based on her signature:

Her thinking style can be characterised as ever-watchful and quick to perceive and process information.

Based on her text sample:

Though she is able to process information quickly, she is willing to slow down to be more deliberate and precise."

gin, read a report and commented shrewdly that it had a Californian ethos. At first I thought the style tended towards generalisations and to being blandly complimentary. The phrases seemed so tactfully written that to find very adverse tendencies I thought one would have to "read between the lines", but I was wrong. After all, my trials were on my friends who are paragons. Aren't they? So I tried inventing an individual with all the uncommon options, which appear to be the higher numbers of the multiple choice. The report rolled out with bared teeth describing someone whom no one would employ or willingly expect to share a flat (or a cell). Very occasionally the program hedges its bets in a single sentence.

Those seeking an -ology can become part of graphology with a vengeance by getting this program. Without doubt Handwriting Analyst is admirably well written and I found it fascinating.

My task has been to review the program rather than to pronounce on the subject of graphology. To judge the usefulness of that art, say to prospective employers, I need further study. It would be interesting to submit a few reports, blind, to a group of people who knew each other, asking them to cast secret votes stating which report related to which person. An idea, perhaps, for a long winter evening provided a late punch-up and crockery-throw is not indicated.

Geoffrey Jago

Handwriting Analyst is published by Ciasa Inc., California. The review copy was kindly provided by MGA Softcat.

RATINGS: Documentation ★★★★★
Value for money ★★★★

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GB-001 *Prosel 8* $40.00
GB-002 *Prosel 16* $85.00

Stack Support

Stacks have arrived in the Apple II kingdom and we're ready to offer charter subscriptions to the first Apple II publication about hypermedia. It's published 6 times a year as a set of stacks and distributed on 3.5 disks. ***Studio City*** includes the latest information on Apple II hypermedia developments, authoring tips, clip art and sounds, and samples of the best public domain and shareware stacks we can find. Requires *HyperStudio*.

SC-1 ***Studio City*** six 3.5 disks $48.00

HyperStudio

HyperStudio is the first program to take full advantage of the sound and graphics of the Apple IIgs. It's HyperCard-like, for those of you familiar with the Macintosh, but cards can use the full color capabilities of the IIgs and no scripting language is required. You can create stacks and add sounds by point and click.

RW-005 ***HyperStudio Ver. 3.0*** $125.00

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A2-N1 ***A2-Central***, paper, 1 yr $34.00
A2-D1 ***A2-Central***, 3.5 disk, 1 yr $90.00

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M291

Overhauling an 'ICE' Hard Disk

Graham Doubtfire discovers how to deal with the innards of one of these early hard disk drives

A few weeks ago my trusty old 12 Meg ICE Hard Disk started to make funny noises and slow down. As I have about 10 Meg of files on it I had no option but to climb inside and see if anything could be done.

The end result is a perfectly working Hard Disk and some useful knowledge on how to take one of these apart which I thought might be of interest to others.

I started by laying a tea-cloth on our kitchen table to cushion any shocks. I then got out my tool kit. You'll need a normal and phillips screwdriver and a small 1/16"? Allen hexagonal key and a pair of long nosed pliars to help ease off some stuck cable connectors.

Place the Ice on the cloth with the rear end (where the cables enter) to the left. Undo the single screw at the top of the rear case. Then turn the Ice on its side to access its base and undo the four screws

holding the case (mine is a cream colour) to the black metal base. Then stand the unit up and slide the cream case off to the rear.

Facing you will be the solder side of a PCB with blue cable connectors to its left. Ease off the blue connector that connects the unit to the Apple. Note the single red stripe on the 'top' of the flat multi-strand cable. It's almost impossible to put it back incorrectly as to do so would require a half twist but nevertheless it is wise to note the correct layout as if it went back upside down I wouldn't like to think what it would do to the circuitry!

Remove a clear plastic connector with four wires at the top of the PCB. Write 'TOP' on the top with a pen!. It supplies the power to the board.

Disconnect two other blue multi-stranded flat connectors from the front PCB (I only ever needed to remove one end of them). Now undo two screws on the top of the unit. They go through a black metal plate and screw into a stainless steel bracket holding another PCB.

Turn the Ice on its side and undo one screw (there may be two - my unit looked as though it should have had two but one had got lost somewhere). These screw(s) are about 2" in from the side of the case and are roughly in the centre of the unit.

Turn the unit up again and the whole drive unit plus PCB should feel loose. If not you haven't undone the correct fixing screws!

Now slide this whole unit out of the black metal case to the right. It should slide out quite easily. If not go back and check the above and particularly that the fixing screws have been undone.

The black case/box containing the power supply, cooling fan etc can be placed to one side.

Take the drive unit and turn it on its side with the PCB facing you. You will see six small hexagonal Allen screws. Three at roughly mid card level, one at the extreme right and two towards the bottom. Undo these and put them to one side.

Now disconnect another plastic edge connector at the top of the card noting the correct way it goes back (again it is almost impossible to get it wrong). Now carefully lift the card but NOTE there is a thin edge connector at the bottom right hand side of the card. I used a small flat screwdriver to GENTLY lever the card upwards. The connector is a card to card one; no flexible cables are involved so don't lever the card up from the left or you will split/wreck it!

The PCB card should now simply lift up and away.

Facing you will be the actual outer metal case of the hard drive itself. You can twiddle it and watch it turn! I did not obviously undo the seals and go inside the drive unit itself which would really bugger it up!

I then started pressing in all the cable connector blocks and using some PCB cleaning fluid bought for the purpose I cleaned everything I could see with a soft brush. Use the cleaner very sparingly.

I wiggled every cable I could see and also repositioned a very thin jumper wire soldered between two terminals which was pressing hard across a number of soldered joints. Whether it made a difference I don't know but it simply didn't look safe!

I then wiggled the small electromagnetic brake that stops the disk spinning when the power is switched off (via a small cork pad on its end). I then thought that as my problem was the slowing down of the disk itself (you can tell because it sounds wrong and also the red LED power light on the front of the unit starts flashing) I might as well disconnect it! So I undid one of the two fixing screws and twisted it sideways so that the pad no longer came into contact with the spinning outer case of the drive unit. I figured that if the electromagnet was getting weak and thus not pulling the brake off it could be the cause of my problem.

After this I started to re-assemble the unit. The PCB goes back first (watch the thin edge connector!) and then the connector at the top. I then screwed back the six Allen screws and then slid the unit back into the black case.

I didn't take the power unit to pieces because I didn't think I could do anything with it!

Screw back the top and bottom drive unit fixing screws and then carefully re-connect all the cable connectors. Take your time and make sure none get twisted or particularly that the top four-wire connector doesn't go back the wrong way round. It has twisted cable (not flat) and could easily be put back incorrectly.

At this stage I plugged it in to the mains (not connected to my Apple just in case!) and with some trepidation switched on. It started up and certainly sounded right so I switched off and slid the cream case back and screwed it home.

I then connected it to my Apple and it has worked perfectly ever since!

What was the trouble? I don't really know although I think moving the electro brake out of the way helped.

A number of the small connectors and relays were loose but from no disk to a fully working one certainly made the effort worthwhile.

So if your ICE doesn't seem to be working properly try taking it to pieces. So long as you don't rush it or use too much brute strength no harm will come.

Obviously don't open the sealed disk drive itself; that will really mess it up as however careful you are dust will get in there and you can be almost guaranteed a head crash in minutes of starting it up!

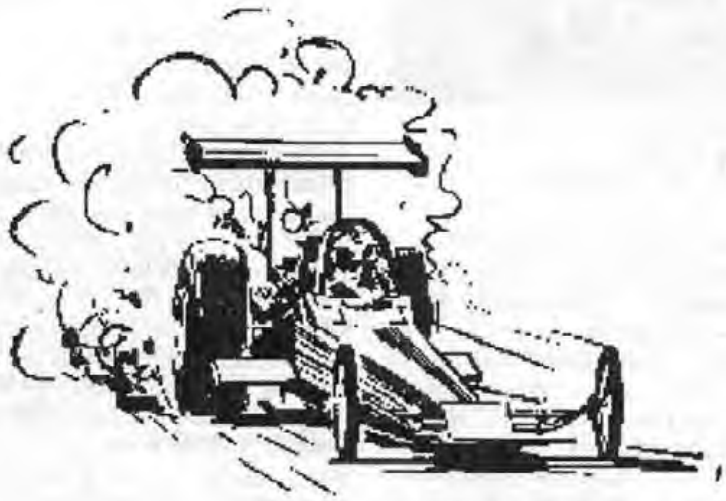
Good luck and if anybody wants to give me a ring I'll be pleased to assist if I can. **Graham Doubtfire**

/RAMbling around the IIgs

Eric Leadbeatter speeds up his IIgs by using the internal /RAM disk

System 6 is a cracker. Appleworks GS is a delight to use. When something superior is needed such as colour or a particular font then the graphic interface is fine. But for normal creative writing and/or Desk Top Publishing the eight bit Appleworks with Timeworks Publish-it remain excellent choices.

Hard drives are nice, indeed with System 5 onward they became almost indispensable. But they are noisy in operation, and after a time can intrude on your concentration. I find the chatter of the blackbird outside my window is preferable to the constant whir of the hard drive, the varied and intermittent song of the 3.5" drive, or the raucous stutter of the 5.25".



So 'Lets hear it for the RAMdisc'.

It's noiseless. It's lightning fast. It takes little time to set up.

I would suggest the first two statements are undeniable, and give worthwhile advantages to computer operation. The third statement needs a little more qualification applied to it.

So why not try this:

Copy UTIL SYSTEM from COPYII PLUS 8.x or above onto a 3.5"disc and rename it to AAUTIL SYSTEM. This will ensure that it is the first system called after PRODOS is loaded. Copy all Appleworks 3.0 or 2.1 files onto the disc, together with the latest PRODOS file VER 1.9 (Xtras Tools PRO25) - the one with the nice program selector. There is still lots of room for your personal database and letter files in an accompanying directory file, and you have a full set of utilities just waiting to be used.

Just as a Hard Drive is almost imperative for easy operation of the IIgs under System 6.0 two Megabytes or more of added memory is desirable. This should allow an 800k RAMdisc to be created by means of the control panel. (Max & Min both 800k). No doubt you have used this before as an internal RAMdisc when unshrinking your AppleXtras.GS files for a quick read of the text. For IIe and IIc users a RAMcard performs the same function, and may be of a dissimilar size to your discs. In that case you need to initially format the RAMcard and then transfer files.

With an 800k RAMdisc created on the IIgs boot your new Appleworks disc in S5,D1 and in a few seconds it will show the COPYII selector screen. Select Copy with format and transfer S5,D1 to the RAMdisc (usually S5,D2). Select Quit to PROdos when ready which will leave you with the PROdos selector screen. Type TAB until you are sure you are looking at the RAMdisc selector screen. Move the selector highlight (up or down arrows) to Apleworks System, then hit return. Appleworks will load to screen in 5 seconds. The Appleworks spelling dictionary is read and ready to report in little more. Timeworks Publish-It can be loaded into the RAMdrive in a similar manner and seems to give even faster response to your demands.

I have timed the loading of System 6 (circa 2 Min), and then the selection and of loading of Appleworks GS (another 2 Min). Or Appleworks 3.0 from System 6 takes 30 seconds overall. Leaving the Hard Drive switched off and booting the new disc from S5.D1 with the consequent copying to RamDrive takes 2 Min 40 Seconds. Very much the same timing but then again I did not have to look under all those papers for the mouse, or clear the desk to find the space to operate.

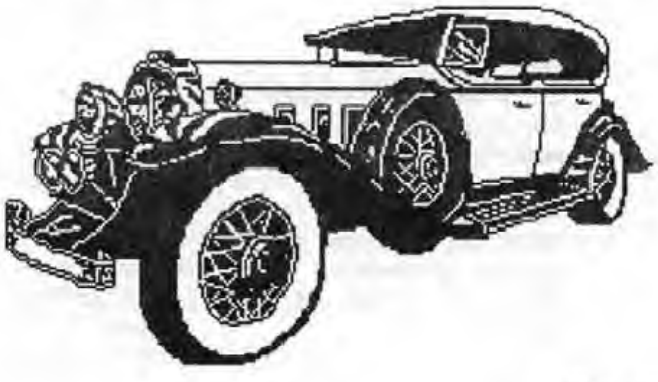
I have 3.5" discs for Pascal 1.3, CP/M Plus, Wordstar, and DBase II. All can be copied to RAMdrive, transferring over the requisite 800k disc from S5.D1 to S5,D2 (RAMdrive) using the appropriate formatting and copy formats. Quiet lightspeed starts from there.

APPLE PASCAL SETUP. Boot 3.5" disc in slot 5. X)ecute Formatter. Format #5. Name RAM5. F)iler. T)ransfer PASCAL:= to RAM5:=. Remove the 3.5"disc from drive #4. O/A-CONT-RESET. CONT-RESET gives]. PR#5.

CP/M+ SETUP. Boot in 3.5"drive to A>. Format B: (RAMdisc). PIP B:=A:*.* Move to B> . . . .(CP/M 2xx operation could be slightly different, consult your manual.)

Some paint programs do not like the existence of RAM in the IIgs set-up, so if hang-ups occur when loading a paint program check that no Ramdrive is lurking in the background. I find I leave the 800k RAM permanently set unless I intend to paint.

May it 'Work' for you. **Eric Leadbeatter**



Anagrams

Arthur Robinson shows us how to program Micol Basic to generate anagrams

A two-stage program. Hopefully, on inputting the number (n) of letters in the word, the first program will write and file a second program for printing permutations of this number of letters.

In the second program, given a file name by the user, each letter is given a number from one to n and these numbers are permutated by a series of FOR-NEXT loops. This will produce many arrangements where a number is repeated, so a routine passes only the arrangements without duplicate numbers.

Finally, the letters corresponding to these numbers are printed.

```
PROGRAM BANAG{WRITES HANAG.N PROGRAM}
    INPUT "NUMBER OF LETTERS ";NUMBER
    GOSUB CALC
    PREFIX "/PART.1/DATA/BASIC/"
    INPUT "NAME OF FILE ";FI$
    WOPEN (8) FI$
    APPEND (8)
    PRINT (8) "PROGRAM ";FI$
    PRINT (8) "DIM L$(12)"
    PRINT (8) "S=";S
    PRINT (8) "NUMBER = ";NUMBER
    PRINT (8) "INPUT W$"
    PRINT (8) "L=LEN(W$)"
    PRINT (8) "FOR A=1 TO L"
    PRINT (8) "L$(A)= MID$(W$,A,1)"
    PRINT (8) "NEXT A"
    FOR A=1 TO (NUMBER-1)
    PRINT (8) "FOR I";A;" =1 TO NUMBER"
    NEXT A
    PRINT (8) "S1 = 0"
    FOR A=1 TO (NUMBER-1)
    PRINT (8) "S1=S1+I";A
    NEXT A
    PRINT (8) "I";NUMBER;" =S-S1"
    PRINT (8) "P=0"
    FOR A= 1 TO (NUMBER-1)
    FOR B=1 TO (NUMBER -1)
    IF A<>B THEN PRINT (8) "IF I";A;"= I";B;"
      THEN P=P+1"
    NEXT B
    NEXT A
    PRINT (8) "IF P=0 THEN GOSUB OK"
    FOR A=(NUMBER-1) TO 1 STEP -1
    PRINT (8) "NEXT I";A
    NEXT A
    PRINT (8) "END"
    PRINT (8) "ROUTINE OK"
    FOR A=1 TO NUMBER
    PRINT (8) "PRINT  L$(I";A;");"
    NEXT A
    PRINT (8) "PRINT SPC(1);"
    PRINT (8) "RETURN"
    CLOSE (8)
    END

    ROUTINE CALC
    S=0
    FOR P=1 TO NUMBER
    S=S+P
    NEXT P
    RETURN
```

A. J. Robinson

The Avatar Project

#: 4248 S2/The Apple Developer
08-Jul-92 17:36:06
Sb: Avatar Computer! pt#1
Fm: Jim Buchanan 72047,115
To: All

Here is some info on a new breed of computer, that I found on a local Apple II network. I thought that some might find it interesting.

From: Harry G. Traver
To: R Twain Macklain
Date: 06-25-92 07:43:15
Subj: Especially

Project Avatar is a machine that I am building with a friend which "Could" be called a Super Apple IIgs. It also has a lot of neat designs and concepts so the machine really is a new platform and not just an Apple II rehash. This machine is NOT a clone. It is a new design that can run most Apple IIe and IIgs software, but it can do a whole lot more. I am working with people trying to get investors so that the machine can get off the ground and actually become something you can buy.

But the road is long and hard because I need several million dollars to actually go into production... If everything works out we'll all breathe easier knowing that someone will be actively selling, supporting and improving a machine that could have taken over the world but was never given the chance...

How does 1024X768X256 colors driven by a TMS34010 sound to you? I am not (REPEAT NOT) building an Apple IIgs clone. This is a new computer using new concepts in computer design and it happens to run Apple IIgs software but this machine is NOT an Apple II. When it's released it will have its own name and identity but it will also draw upon a very large software base immediately. I hope that developers such as Microsoft and Lotus will see the machine and develop their software on it due to the sheer speed and parallel processing power it has...

#: 4266 S2/The Apple Developer
11-Jul-92 15:20:46
Sb: #4248-Avatar Computer! pt#1
Fm: Edward Floden 73220,1624
To: Jim Buchanan 72047,115 (X)

I find only one problem with this information: the name of the sender on the original message, 'Harry G. Traver', is NOT the person who is pursuing this project! "Burger Bill" Heinemann (sp.?), somewhat renowned Apple II programmer, is the designer of the Avatar. The

information can be found in the 'Across the Boards' section of America Online. The Internet newsgroup comp.sys.apple2 is also carrying a discussion of the project.

#: 4274 S2/The Apple Developer
12-Jul-92 09:36:05
Sb: #4248-Avatar Computer! pt#1
Fm: Robert Rosenberg 73766,267
To: Jim Buchanan 72047,115 (X)

The make/break test on their claim of GS compatability is how they are going to handle the Tool Box Code that is in the GS ROM1/ROM3 chips. If they can provide support for all the documented entry points, they _may_ have something (since the ROMs are stable at this point). OTOH, they will need to have some way of adding the extra code/fixes/entry points that TS2 and TS3 add to the ROM Tools (which could just require that their support have the updates already there. If they can not do this, it will have problems working (until such time as a new version of the GSOS comes out).

This problem (need to emulate the ROM tools) was one of the reasons why the Cirtech Mac-in-a-GS card never got off the ground (there was the problem with not enough pixels on the screen to emulate a Full Size Mac Screen, of course <grin>).

#: 4249 S2/The Apple Developer
08-Jul-92 17:38:24
Sb: Avatar Computer! Pt#2
Fm: Jim Buchanan 72047,115
To: All

The Avatar does not work with a RamFast, but it really doesn't need one since the onboard DMA moves memory a LOT faster than a RamFast can.

I really can't discuss how IIgs compatability is achieved in detail without a nondisclosure from you since patents have been applied for on the machine and discussing them in a public forum would invalidate the patent request. Let's just say that there is NO patented Apple technology to be found in this machine because it is so radically different from what's available from anyone...

No, Avatar will not let you talk to god since according to different sources....

Avatar is the name of a wizard in the movies "Wizards" Avatar is the name of the hero of Ultima. Avatar is the personification of a diety (Dungeons & Dragons) Avatar is a spokesperson for a god (Webster's dictionary) Avatar sounded good at the time (Burger Bill's excuse)

When I am also contributing hardware and software design. I'm in on this project, gang.

#: 4250 S2/The Apple Developer
08-Jul-92 17:39:22
Sb: Avatar Computer! Pt#3
Fm: Jim Buchanan 72047,115
To: All

Avatar is NOT a new Apple][GS. It can RUN GS stuff, but it's NOT a GS, per se. It is a machine who's time has come, and it has solid principles never before used on the home market today.

Parsons Engineering already has a name for itself with the introduction of Sluggo 3, a device for programming and designing home games. It has already proven itself in the design of games for Nintendo, Super Nintendo, Gameboy, Genesis.

So, for Avatar, do NOT consider it a rumor.

Tidbit: someone mentioned Pete Snowberg is still working on his DSP (hires GS graphics card) project, but no more details were forthcoming. Possibly, something will show up by Kansasfest.

From: CornMan/Blah!
To: Sax Addict
Date: 06-25-92 13:21:42
Subj: Re: Avatar

1) It's not "made" by Apple Computer Inc. 2) Apple has only copyrighted the ROMs. If you simply rewrite the code in the ROM, yet it still does the same functions, it doesn't infringe on the copyright (Laser did this). 3) If I understand correctly, this computer isn't another Apple II. It's a new type of computer that can run Apple II (including IIgs) software. Sounds good if you ask me.

PLEASE SPREAD THIS TO *ALL* SYSTEMS/NETS YOU CONNECT TO! THANX!

Downloaded by Bryn Jones, July 1992.

User Group Contacts

Apple II South

Catering for all Apple II computers and specialising in the pre-IIgs machines. Meets at different venues over the South of England on a regular basis.

For further details contact:
Bryn Jones
[illegible]

GS Club

IIgs specific group covering the whole country. Publishes a bi-monthly disk of news, reviews and software.

For further details contact:
Ian Archibald
[illegible]

Apple II North

General Apple II and IIgs group specialising in the North East of England.

For further details contact:
Alan Armstrong
[illegible]

Beginner's Guide to the Apple II

An article written for new users, by Andrew Hardwick

So, you've just obtained your Apple II personal computer, but as of yet do not know how to use it. If this is you, keep reading.

The Apple II is a computer that has a very long history, in fact longer than any other personal computer. This fact means that over the 15 years of its existence, a lot of software and hardware have been developed for it — as well as several different models of the computer.

First of all I will give a brief introduction to the Apple II computer. This serves two purposes. One is to familiarise yourself with Apple Computer and the kind of support you could have expected and what you are likely to expect today. The second reason is so that you can discover, if you do not know, what kind of Apple II you have and of how much use it will be to you.

In 1977, the Apple II computer was introduced. It was the creation of mainly one man, Steve Wozniak. His reason for building the Apple II was mainly to play Breakout. However his friend, Steve Jobs, saw the possibility of making money from the Apple II and persuaded Wozniak to sell the computer. This is how Apple Computer Inc. was set up.

The difference between the Apple II and the computers for sale in those days was that the Apple II was ready to use. It came packaged in a box with a keyboard at the front which allowed for commands to be easily entered. A display could be easily obtained by connection to a TV and files could be stored and loaded when necessary by tape.

The Apple II was an immediate success. The new managers of Apple, though, were less than optimistic. The computer companies of the day hardly lasted more than six months, so it was decided that new products were needed quickly in order to prevent Apple going the same way. Mike Markula, the then head of Apple, drew up a list of products that needed designing. At the top of the list was a disk drive. In those days very few computers had disk drives, and were very expensive. However Wozniak discovered that he could remove most of the components in the disk drives and emulate it all in software. This is what he did and the Disk II and DOS were born. Together this made the Apple II a formidable computer and sales were ever increasing.

This brings us to the end of the description of this particular model. Although there were variations, noticeably the Apple II plus, or Europlus and the ITT 2020. The ITT 2020 was an Apple clone. However, a licence had been obtained to make this from Apple so because of this it was legal, and also almost completely compatible. In many ways the ITT 2020 was superior to the real Apple.

To identify the above computers should be easy. The Apple II and Europlus both have a badge in the middle of the computer, about three inches above the keyboard. The ITT 2020 is even easier to recognize because its casing is silver, as opposed to the standard Apple cream. If you do have one of the above computers, the chances are that it has 48K of RAM built onto the motherboard. This can be seen by having a look inside the computer. Inside you should find a power supply on the left and the rest of the case occupied by a board. This is the motherboard, i.e. the computer itself. If you look at this board you should see lots of IC's in rows. If, near the middle of the computer, there are rows of chip sockets but no chips in them then you have not got a complete RAM set. Nowadays this RAM is so cheap that you absolutely must buy some. If you do not, you will be able to use very little software. What you need for these sockets are 16Kbit chips. You should have to buy these in multiples of 8, i.e. 8 or 16. Clocktower should be able to supply these.

Now that you have a full complement of RAM, you should be able to run most of the DOS 3.3 software. DOS 3.3 is the last version of DOS to be made. After this a new kind of operating system was devised, ProDOS (see below). However most Apple II's had 64K and this is what a lot of the new software needs, including ProDOS. You may say though, "How can I do this, he just said I had a full complement of RAM?" This brings us to the other reason why the Apple II was and IS great. Expandibilty. If you look at the back of the Apple II you will see a row of slots. In the original Apple II there were 8 of these slots. If you have nothing plugged into these slots you are in a bit of a bad way. In slot 0 it is usual to have a 16K ram card. This then allows you to run most Apple II software. Another thing that it is necessary to have are disk drives. The most common of these for the Apple II are the 5.25" Disk][drives. These connected to the Apple II via an interface card that plugged into the slots at the back of the Apple. Without these the Apple is virtually useless. If any of the above are missing then try and obtain some as soon as possible.

Next in the development line was the //e. This is an enhanced version of the original. What this gave you was 64K of memory on the board, which replaced the need to have a RAM card. A slot was provided in the middle of the computer which allowed more memory to be installed and 80 column capabilities. Also different was a lowercase keyboard, with more special keys such as the Apple keys, delete and a full set of cursor keys. On the back panel there was also a connector for a joystick.

The //e went through a number of changes to the basic design. The first involved changing 4 IC's inside the computer and was called the //e enhancement kit. This provided closer compatability to the //c (see below) and is necessary to run most of the new software. The second included a physical change as well. The most prominent difference is the keyboard. As well as all of the standard keys, there is also a numeric keypad. This model also had the above enhancemnt kit installed. To tell which type you have, see below. To set up the //e follow the steps for the II+.

The //c was next in 1984. This provided the functionality of the //e in a small self-contained unit. The difference between this and all other Apple II's is that no slots were included, but instead it had all of the normal peripherals built in. These included a disk drive, a modem and printer socket, a disk port, a video port and a joystick port. Three models of this computer were available. The standard one came with 128K of RAM, a built-in 5.25" disk drive and a 1MHz 65C02. The next was functionally the same but had 1Meg of built-in RAM. The third, called the //c+ was the last and in some ways best Apple II ever built. This had a 3.5" drive as opposed to the 5.25" one, 4meg of RAM and a faster microprocessor, a 4MHz 65C02. This makes it the fastest Apple II ever built.

The final one is the //GS. This is the most powerful Apple II. It can run virtually all of the original Apple II software whilst being extremely different. This is a 16 bit computer and most of the new software takes advantage of its excellent features. With this computer you get a Graphical User Interface (GUI), a mouse, choice of seperate keyboards, i.e. not built into the case, and a multitude of other things, including great sound and graphics. Two versions of this are available, a standard 256K version and a 1meg version. To set up the IIGS folow the steps for the II+.

Now that you have your system almost ready, you want to set it up. First we need power. For this connect a kettle type lead into the socket found on the back left of the computer. Next, we need a picture. There are two main ways to do this. If you have a video-in socket on your TV or video, you can connect the Apple II video-out socket to the socket on your TV or video. The socket on the back of the Apple is called a phono plug. A suitable lead could be obtained from any audio video shop, e.g. Currys. The other way is by what is known as an RF modulator. This produces signals that can be fed directly into your standard aerial socket on your TV and then tuned in as normal. If you have a little board in the back or a box with a TV-type connector coming out, this is what it is for. Connect this up in the normal way using a standard TV lead. The easiest way to tune your TV in is to first remove the Disk II interface out of your computer and then turn on the computer using the switch on the left hand side. As the switch is switched on, you should hear the computer beep. If not, check your connections then make sure all the cards inside are securely connected and then as a last resort try pushing down on the the chips inside the computer to make sure that they are all securely connected. If the computer still does not work, it would

be wise to have an Apple service centre look over it for you.

Now that the computer is on, press a free channel on your TV. Then tune it in as usual. When the Apple II screen appears, it should be all black with 'Apple][' at the top centre and a ']' just below it on the left.

If you've got this far, congratualtions! You now have a fully working Apple II computer that can be used for most things that you would want to do. Now you will want to know what you can do with it.

First we need a disk. Hopefully you will have got one with the computer, but if not you will need to purchase one from a PD library such as Apple2000. A good disk to start with is System Master for Dos 3.3. This is the one that Apple used to give with the Apple II, and has a few example programs on as well as DOS itself. The chances are that you way have got this with your computer. If not an Apple Dealer might have one lying around unused or Apple2000 might be able to supply a copy.

Now that you have it, put it in the disk II. It will only fit in one way — so if you encounter resistance, try it the other way. When it is in, close the drive door. Now switch on the power and off we go.

As you switch on the power you will hear a banging from the disk drive. Do not be alarmed, this is normal. After a while, a screen will appear which looks similar to below.

```
DOS VERSION 3.3                          08/25/80

APPLE II PLUS OR ROMCARD              SYSTEM MASTER




   (LOADING INTEGER BASIC INTO LANGUAGE CARD)
```

By looking at the date at the top you can see that we are looking at a very old disk. Still, this is a good starting point and will give everyone a chance to use their computer. You will notice that it has said that it has loaded Integer Basic into the language card. What this means is that it has loaded Integer into memory inside the computer. On the II+ this is on the 16K expansion card, on all others in standard memory. Integer Basic is an early version of the Basic language that used to come installed on ROM's in the Apple II. Because a lot of programs were written for this language, it was decided to provide a way to replace temporarily the Basic in ROM, called Applesoft, with Integer. To do this, you type the command 'INT'. The easiest way to tell the difference between the two languages is the prompt. Applesoft displays ']' whilst integer displays '>'.

Now we shall issue our first command, and probably the one you will use most. Type 'CATALOG'. If you have a computer with lowercase, make sure the Caps Lock key is pressed. When you have typed it, press the Return key. If you make a mistake, press the Back Arrow key to delete what you typed. The Return key must be pressed after all commands, to tell the computer that you have finished typing. You will now have a listing of all the files on the disk. You read the catalog from left to right. Each line is a seperate entry. The stars on the left tell you that that file is locked, i.e. cannot be removed off the disk. The letter tells you what sort of file it is. For example the first one is A. This means that this is an Applesoft file. Other possibilities are I for integer, T for text and B for Binary. The next three-digit number tells you the size of the file. The last column is the name of the file (e.g. 'HELLO'). Looking down the list, we can see quite a few files. The first one is the one that DOS first looks for to run when the disk is booted. This is the one that provided the screen that we first saw. This can include anything you want, but would require a program writing (maybe something for later on?). If we look at the bottom of the screen, we can see a flashing block on its own. This tells us that something else is waiting to be displayed. If we now press a key, some more files will appear. At the bottom of the screen the Applesoft prompt ']' has returned. This tells us that we can now enter another command. Well, why don't we try running a program? Something simple first. Looking near the bottom of the screen, we can see a file called 'PHONE LIST'. Let's give this a try. Now, to run a program we type 'RUN ' followed by its filename. So type 'RUN PHONE LIST'.

After a bit of whirring from the disk drive, a menu will appear. It says 'Apple Computer Inc. Phone List'. Below that it says that no listings are in, that we can put in another 150 and that the printer is off. So let's try entering a number. Type 3 followed by return. A new screen appears now. It says to enter a name so type 'Apple2000'. It now says enter a number, so type '051 928 4142'. It next displays the information we just entered and asks if it is correct. Type 'Y' and press the Return key. We are now back to the first screen. The only difference is that it now says that we have an entry inserted. To see our number and make sure it is really there, type '2'. At the top of the screen, we can see Apple2000 followed by the number.

As you can see, this is a simple program that lets us store and retrieve telephone numbers. Such a program is called a database. Computers can be used to store all sorts of information using databases.

Now let's try something a bit different. If you now press the CTRL or Control key (they are both the same, but say different things on different keyboards) followed by Reset and let go of Reset before Control, you will get back to the ']' prompt. What we have done now is to halt the computer in its action and reset it back to its original state. Normally, you would not want to exit out of a program this way as any data will be lost, but as we did not want to save the data it did not matter. We will now try another program. Type in 'RUN APPLEVISION'. Now the Apple will draw a picture of a room with a TV. After a while, a message will appear, followed by a man dancing to some music. This is only a simple graphics and sound demonstration, but it does show that it is possible. If we now press CTRL-RESET, we will stop the program. You may now notice that the ']' prompt has not appeared, but instead the '>'. You may remember from above that this means we are in Integer Basic. When we ran the last program, it was an Integer Basic file. Because we were in Applesoft Basic, it could not run. Therefore, what the computer did for us was to automatically switch into the Integer Basic mode so that the program could run. If Integer had not loaded on boot-up, then the program could not have loaded and we would have got the message 'LANGUAGE NOT AVAILABLE'. To get back to Applesoft, we have to type 'FP'. We now get the familiar ']' prompt back. If for any reason you do want to use Integer Basic without first loading a program, just type in 'INT' and you will be switched over.

Now we will load in our last file. We will load in FID, which is a copy program. This allows us to copy files and disks easily. So type in 'RUN FID'.

You will now have got an error message which says 'FILE TYPE MISMATCH'. This seemingly cryptic message is trying to tell us that the file we tried to run was of the wrong type. If you remember, there are four main types of files in DOS, denoted by the letter in the catalog. If we catalog the disk, near the bottom is FID. Its file type is B, which is binary. This means we cannot load the file in a normal way.

With binary files, you must be careful. Not all binary files are meant to be run. Therefore the command for running these files is different so that they cannot be run accidentally. The command for running binary files is 'BRUN'. If, when you use this command, the program does not load, it is probably not meant to be run, so leave the file alone.

Type in 'BRUN FID'. This time, we get another menu with lots of options. Most of these are fairly self-explanatory, but a word of warning. Be careful what you do. If you don't know what you are doing, you could destroy your disk. Therefore, unless you are fairly competent with copying and deleting files, press '9' followed by the Return key.

This completes this brief description of the Apple II. Please look at the other files on the disk, as this will make you more familiar with your computer. Next time, I will look at ProDOS and GS/OS. In order to use ProDOS, you will need a computer with at least 64K of RAM. In order to use GS/OS, you need an Apple //GS with at least 512K.

To determine how much an Apple //GS has, take off the lid. If there is a card installed in the front right, you have enough. If not, look at any other slots that may be occupied by a card. If any of these are RAM cards, you should have enough.

To determine if you have an enhanced //e, look at the message on turn on. If it says 'Apple][', it is unenhanced. If it says 'Apple //e', it is enhanced and can run most of today's software.

EcoLinking

The next best thing to being there

by Don Rittner

During most of the day and night when people are going about their normal routine, more than 40 million people are communicating in a very special way — by using their personal computers. Writers are sending their copy to editors; environmental groups are posting calls to action; business plans are being sent across the country in seconds; and literally thousands of scientists, students, and professionals around the world are carrying on dialogue and debate about some area of concern. What is amazing is that all this takes place without one person leaving their office or home computer.

You, too, can become part of this exciting online global community. All you need is access to a personal computer, a modem, communications software, and a 'phone line. According to the latest U.S. Census figures, more than 75 million Americans own a personal computer and almost one quarter of them have a modem, an inexpensive device that lets your computer send information over the 'phone lines. With personal computer prices constantly dropping, this figure is likely to rise rapidly. You may already be ready to EcoLink!

There is a tremendous amount of information residing on mainframe and personal computers and it is available to the worldwide environmental community. Academic networks like the Internet, Bitnet, Fidonet, and Usenet contain thousands of discussion groups on a variety of issues, including the environment, and allow the computer user access to some of the best scientific minds in the world. Commercial online services like America Online, CompuServe, and Econet provide forums and file libraries where users can, for a small hourly fee, meet similar-minded environmentalists, download the latest environmental newsletter, or carry on a debate in real time with several other people. Online bibliographic companies let you search thousands of published literature in minutes. Finally, computer bulletin boards offer an inexpensive way to retrieve environmental information since there are more than 100,000 of them spread throughout almost every city in the United States and the rest of the world.

Perhaps the most important asset is linking up with people who share your interests in preserving the environment no matter where they live, be it Albany, New York, or across the ocean in Zambia.

Let's look at a small sample of what you can get from a some of these resources:

GLOBAL NETWORKS

The Internet. Sponsored by the U.S. Government, part of the Internet is open to the public. The Internet is actually a few thousand separate computer networks that talk to each other. Thousands of the world's leading scientists are on the Internet and it spans more than 120 countries. You can send private mail across the world in seconds. Discussion lists on a number of environmental and scientific topics are open for free membership. Here you can debate the issues with the best minds around the world. Along with private mail and discussion lists, you have access to some of the best library card catalogs, databases, and bulletin boards around the world. Once on the Internet, you can exchange mail and resources with people on Bitnet, Usenet, and Fidonet, three other global networks, and many of the commercial online services.

Bitnet. Bitnet is mostly an academic network and is similar to the Internet. You can send private mail, participate in environmental discussions through mailing lists, and retrieve documents from areas called servers.

Usenet. Usenet is a series of discussion groups, often carried by the other networks, and many environmental topics are discussed.

Fidonet. Fidonet is an amateur computer network, similar to the radio ham network, where more than 10,000 private bulletin boards share mail and discussion groups, called echos, with each other. This system, while anarchistic, works remarkably well and now spans more than 40 countries including the former Soviet Union. There probably is a Fido BBS in your city.

ONLINE SERVICES

Commercial online services usually charge a small hourly fee to access their systems. There are a tremendous amount of resources you can get besides meeting up with people who share your interests.

America Online. This Virginia-based company is the most user friendly of all of them. AOL provides their telecom software free for both PC, Mac, and Apple platforms. Moreover, it uses a graphical user interface. A series of icons and buttons make finding information on AOL painless. A few of AOL's resources, besides private email (and the ability to send email to the Internet) include:

The Environmental Forum. Here hundreds of people from around the country debate environmental issues. There are hundreds of files that you can download into your personal computer from environmental cartoons to how to obtain information using the freedom of Information Act. Real time interviews take place in the chat room.

Environmental News. You can search, using keywords, for the latest environmental news from wire services like UPI, Reuters, and others, fast and easy. Each week, an environmental weekly news file, compiled from the previous week's environmental news, is uploaded in to the Environmental forum's file library. This way you can keep abreast of worldwide environmental news in a timely fashion without having to search for it yourself.

Online Encyclopedia. Are you conducting research and require a definition of a term? AOL's keyword searchable encyclopedia gives you instant access to thousands of articles.

CompuServe. The granddaddy of on-line services, CIS has been around since 1979 and provides many services.

Network Earth Forum. If you are a fan of TBS's Network Earth TV show on Sunday nights, you will love the Network Earth Forum. You can discuss each episode with the producers of this great environmental show immediately after watching it. Also, you can suggest ideas for new shows, participate in debates on a variety of topics, and download files. CIS also has forums on the Good Earth, Outdoors, Science/Math, Astronomy, and Safety.

Econet. This non-profit network, part of the Institute for Global Communications, devotes itself solely to environmental issues. Hundreds of environmental organizations post announcements, calls to action, requests for letter writing, discussions, and even post their newsletters for all to read. Econet has gateways to other networks so you can send mail to people on the Internet, AOL, CIS, and more than a dozen others.

BULLETIN BOARDS

A computer Bulletin Board, commonly called a BBS, is found in almost every city in the United States and throughout the world. Here one individual creates an electronic storehouse of information on any subject imaginable. There are many bulletin boards devoted to environmental issues and all carry hundreds of downloadable files, reports, articles, news, and discussions. There are bulletin boards that specialize in topics from Astronomy to Zoology. Most are free to access. Those that participate in the Fidonet link you up with more than 10,000 bulletin boards around the world.

ONLINE LIBRARIES

You can prepare research bibliographies in minutes instead of having to thumb through hundreds of indexes at your local library. Bibliographical retrieval companies like Dialog and BRS offer the computer user an inexpensive set of databases that cover science, environment, and technology. An average search takes 10 minutes compared to weeks at the library. And you no longer have to worry about library hours. Online searching is available 24 hours a day, seven days a week.

SUMMARY

This is just a small sample of the environmental resources available to you if you use a personal computer. There is no doubt that we live today in a 'global village.' The technology of telecommunications has given everyone the power to communicate their ideas across this vast digital frontier instantly. The development and growth of a worldwide environmental network, the GaiaNet, is instrumental in assuring that our common goal for a worldwide sustainable environment will be accomplished by working together — no matter where we are. There are no geographic or time boundaries in the online world! The tools are there to communicate with each other; to build bridges of understanding and cooperation regardless of race or culture. Joining this community is as simple as turning on your computer.

For more information on how you can join the worldwide environmental community, read EcoLinking - Everyone's Guide to Online Environmental Information, by Don Rittner. It is published by Peachpit Press (1992, Berkeley, CA. 800-283-9444).

MUG NEWS SERVICE, 1992

Environmental Images

A Treasure for Newsletter Editors
by Don Rittner

Environmental organizations often need a good assortment of illustrations to use in their newsletters and other publications. Artist Josepha Haveman has compiled GAIA Environmental Resource, a collection of full colour and black & white illustrations with environmental themes — and more.

Haveman has scanned in more than 500 photographs/illustrations and created a database of other useful environmental information and combined it all on one CDROM disc. CDROM, or Compact Disk — Read Only Memory, is an excellent storage medium for large amounts of data because it can store more than 250,000 pages of information, graphics, sound, or combination of all three on a small plastic readable disc that is accessed by using a special reader. Using Apple's Hypercard software program, Haveman has created a series of Hypercard "stacks" that integrate the 500+ photographs as well as information on more than 400 environmental organizations, 200 plus environmental publications and educational material, and demos of environmental related software, all in an easy 'point and click' format.

Access to the material is via GAIA's main menu, or home card, and is arranged under four major categories: Graphics Tutorials, PICTure Preview, Environmental Message, and Digital Resource Demos.

The PICTure Preview category contains the scanned colour and black & white images. The images are in 24-bit color and were scanned in from still and motion video and saved in PICT (an Apple graphic standard), TIFF (Tagged Image File Format), and EPS (Encapsulated Postscript) formats. These are graphic formats used for the Macintosh computer although TIFF files can be converted and used with PC computers. EPS (42 images) and TIFF (500+ images) formats produce the best resolution when printed.

The images are arranged according to five themes environmental (birds & deer, logging, plastics, pollution, and recycling); foliage (flowers, leaves, seaweed, and tree/shrub details); Landscapes (aerial views, forests, mountains, seaside, wetlands); Marine (boats/fishing gear, seashells); and Sky (fog, various, storms, sunset). These images are easily transported into a desktop publishing program using the Macintosh's familiar 'cut and paste' technique. The images contain specific as well as general environmental themes. For example, while you can find nice images of wildflowers, you will also find images of pulp mills, dead birds in oil, recycling plastics and other elements of the negative impact on the environment, so this collection should not be viewed as a typical collection of just pretty pictures.

If the pictures weren't enough, Haveman has also created a large database in a section called "Environmental Message." Contained within is a database of more than 400 educational institutions, environmental organizations, federal and state agencies, and museums and preserves with name, phone number, address and summary. A second database contains more than 250 sources of audio tapes, books, digital media, films, magazines and video tapes related to the environment. She includes her reasons behind making the disc-her environmental message, and a discussion on GAIA theory. GAIA is a growing philosophy in the environ-mental movement that the Earth is one interlinked living system and named after the Greek goddess GAIA, meaning Mother of Earth.

The Graphics Tutorial category contains a tutorial on how the CDROM was produced, notes about the author, graphics terminology, definitions of the file formats used on the CDROM, and other useful technical information.

In keeping with the digital nature of this product, the author's last category "Digital Resource Demos" contains demo versions of several commercial and free environmental related computer programs: Earthquest, Global Warming, Simcity, Balance of the planet, Animated world, and Simearth Explorer.

There is a great deal of useful environmental information packed on this one CDROM Disc. The scanned images are useful to editors who need good illustrations to back their stories or to spruce up otherwise drab looking newsletters. The database of organizations and educational materials is a good start to locate additional information for individuals, groups, or anyone needing to locate general environmental material.

Requirements: Apple Macintosh, Hypercard, System 6.02 or better, CDROM Player.
Source: GAIA Environmental Resource, by Josepha Haverman. Wayzata Technology, Inc. P.O. Box 807, Grand Rapids, Michigan 55744. (800) 735-7321

Price:	$249
Rating:	4.3 (5 is highest)
User Friendly:	4.5
Significant environmental value:	4.3
Educational value:	4.3

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MUG NEWS SERVICE, 1992

Don Rittner is the author of EcoLinking: Everyone's Guide to Online Information (Peachpit Press), and Host of America Online's Environmental Forum.

New Version!

The Easiest Way to Organize Your Contacts and Time!

InTouch

MacUser rated InTouch 1.0 "The best name and address DA for the Mac." Why? Because every InTouch feature was painstakingly designed to save you keystrokes and time. InTouch 2.0 adds integrated reminders, sorting, contact grouping, fax cover sheets, address books and many other new features making the best even better! And without question, InTouch 2.0 remains the easiest program of its kind to use!

InTouch 2.0 also includes Snap*, a remarkable utility that lets you print an envelope or label from your word processor without ever launching InTouch. Even if you don't know the address. Just highlight the name in your letter, hit a hotkey, and Snap* will find the address in InTouch, paste it in your letter, and print an envelope with any of your custom printing layouts.

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Apple 2000 presents....

FUN + GAMES

Welcome to the Fun and Games section of Apple 2000 Magazine

Infocom's Greatest

Got $60 or so to spare? Are you looking for a single purchase to keep you in adventures games for the next two or three years? Then get ready to shell out your hard earned cash on what might properly be called the bargain of a lifetime — The Lost World of Infocom. For a measly $60, you get 20 (yes, 20!) of some of the finest text adventure games ever written. Available on either a triple 1.44Mb disk set or on CD-ROM (which also contains the IBM versions), the games even come with a hint booklet, so there are no excuses for not finishing any of them. The complete list is:

Ballyhoo
Beyond Zork
Deadline
Enchanter
The Hitchhiker's Guide to the Galaxy
Infidel
The Lurking Horror
Moonmist
Planetfall
Sorcerer
Spellbreaker
Starcross
Stationfall
Suspect
Suspended
Witness
Zork One
Zork Two
Zork Three
Zork Zero

Bearing in mind that these games used to cost £30 to £35 each, all twenty for $60 (plus shipping costs etc.) really is a fantastic bargain. If you're into text adventures, this collection represents the best value for money I've ever come across. (And if your favourite game isn't on this list, rumour has it that Volume II is due out in the not so distant future...) P.K.

Darwin's Dilemma

A new version of this game has recently been released. All the features of the game reviewed in our review late last year have been retained, but one or two penalties for sloppy play have been removed. (Hah — some of us had to do it the hard way!)

More importantly, the game now includes an Icon Editor which allows the player to customise each and every species. So if you want to design an evolutionary tree where four slimeballs evolve into a Margaret Thatcher (or six planks of wood evolve into a Neil Kinnock for that matter) then you have all the necessary tools at your disposal.

(It's good to see such improvements being offered as a part of the game, rather than the precedent set by other companies who have the gall to charge for their game editors!) P.K.

Lemmings, the strategy cum puzzle cum just-about-everything-else computer game, that has already been highly acclaimed on other platforms, has nearly found its way to the Mac. The Mac version is supposedly going to be the best version to date, and may already be available as you read this! D.T.

Electronic Arts (the makers of PGA Tour) may have done it again with their hot new release, 4D Boxing (although how it can be four-dimensional I do not know!). As a somewhat violent action arcade game, it should be perfect for taking your aggressions out on your new keyboard, and rendering it useless in days. Available from MacWarehouse for £35. D.T.

And finally...

Should members decide to disband Apple 2000, then this will be the last edition of Fun + Games. My thanks to everyone who contributed to the club and helped me have so much fun over the past ten years. Don't forget folks — it's ***supposed*** to be fun...! P.K.

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Darwin's Dilemma 2 & Shanghai II — The Dragon's Eye

Two more-than-equal sequels, reviewed by John Beattie

Computer programs must be the only area where the sequel is almost certain to be an improvement on the original. In other fields, from books to films and from the follow up to Gone With The Wind to Halloween XIII (or whatever number they've reached) the sequel is often a pale shadow of the original, often deteriorating into farce and devaluing the initial concept of the original.

Not so with computer programs. Firstly, improvements in hardware often allow for more functions, better graphics and greater depth than the original. And where creators in other forms run out of ideas and so end the original, programmers often have to be stopped from adding yet more embellishments to their programs by the constraint of a deadline. And even if they run out of ideas, users often give some feedback as to the improvements and features they would like to see added.

The original Darwin's Dilemma was a simple, one player game involving pushing icon tiles horizontally or vertically around a board to merge them with similar tiles and "evolve" them into new, higher level tiles which again merged with each other until only one tile was left on the board at which point you were transported up a level to be faced with more tiles to "evolve". And so on.

While I found it initially challenging, the lack of a high score table meant remembering to write down your score each time - and remember where to find the piece of paper - to find out if you had beaten your previous score. And after a while the icons began to bore.

Darwin's Dilemma 2.0 corrects both these deficiencies: if you qualify, your score is added into the top 10 table. And you can clear the high scores when your family relegate you to last.

With the editor supplied, you can grab icons from any program, or make them yourself with the supplied icon editor, and create your own evolutionary world. The makers suggest using an icon of your boss and evolving him into pond scum! If he suddenly appears, you can always use the Hide! command in the Game menu and invoke a built in screensaver to cover your idleness.

When I first got my upgrade to Darwin's Dilemma 2.0, I discovered a bug: entering the letter "o" in a name on the high score table caused the game to quit. I posted a message on Compuserve where InLine Design have their own area. The bug was confirmed by them within 36 hours. It appears that none of the beta testers had a name containing the letter "o", so had never noticed the problem. In due course, a patch was posted on Compuserve and no doubt the latest versions are sent out already patched. The patch itself came with a very apt icon - an Elastoplast.

I like InLine Design; their games are original, well-designed, free from copy protection and are not blood thirsty shoot-em-ups.

So Darwin's Dilemma 2.0 is a definite improvement on the original. If you have - and liked - the original, you will love the improvements they've made, and you can upgrade directly from InLine for $20. If you haven't already got it, try it. It's colourful, addictive and fun.

Even I could see that Darwin's Dilemma could be improved, but what about Shanghai? It's been one of my favourite wasters of time on my GS and then on my Mac. Stated simply, the original was basically a solitaire game played using Mah Jong tiles instead of cards. These tiles were piled up and could only be paired off and removed from the board if they could be slid left or right. Like all good addictive games, the basics are easily stated and grasped but maddeningly difficult to master and beat. Add tournament and timed modes and that just about sums it up, except that you just have to have one more go, and another.....

So how could it be improved, I wondered as I unwrapped it and installed it on my hard disk. It seemed to me to be unimprovable - which just goes to show what a boring, unimaginative accountant I am.

Well, would you believe 7 additional tile sets; sounds and animation appropriate to the tiles you match up; 14 different layouts for the tiles, plus the facility to create your own layouts, head to head play against other humans or the computer. All these have been added to this already excellent game.

The new tile sets include Playing Cards, Flags of the World (some of which play "Thank you" in the appropriate language when you pair them), Fantasy World (for the Dungeons & Dragons fans), Sports, Numbers & Letters, Animals and Hanafuda - a series of Japanese images of flowers, people etc. They are all beautifully drawn and have appropriate sounds or animations when paired.

In addition to the original layout, there are 12 new layouts based on the 12 animals of Chinese Astrology (Horse, Boar Rat etc.) and a gravity defying floating tile layout. These are helpfully grouped into levels of difficulty in the manual. If these aren't enough, you can design your own set up with the Layout Construction Set.

A new game called Dragon's Eye sets you against either the computer or another player in a game where one side tries to fill up a shape while the other tries to destroy it by pairing off tiles and removing them from the

board.

There is also a Tournament mode where you play four of the Layouts in each turn and a full tournament consists of four rounds - three layouts preceded each time by a game of Dragon's Eye.

The Regular game, Tournament and Dragon's Eye can be played either as solitaire or as a Challenge, where you compete against another player.

Unlike the first Shanghai, Shanghai II can be played on an LC's 12 inch screen, with smaller tiles being provided for this.

What more can I say? Buy it. Be a time waster like me. The graphics are lovely, the sounds superb and the animations intriguing. A good game has been improved certainly beyond my expectations.

A couple of minor quibbles were that the original program sometimes quarrelled with After Dark and that the registration card was returned to me because Activision had moved and left no forwarding address!

Both these problems (and some other bugs which I hadn't run into) were cured by Brodie Lockard, who was the original designer of Shanghai II: he posted on Compuserve an updater and a demo for 3 sets of tiles which he had produced as an add-on for Shanghai II. I sent him $15 and he sent me 2 disks with 3 beautiful tilesets - Beasts, Tropics and Landmarks - together with the updater. The updater not only fixes problems, it adds a function of pop-up facts on each tile (except Alphabet and Playing Cards, but including his new tilesets) when you press the Command key and hold down the mouse button on a tile. These facts range from an explanation of the tile to telling you the height of the Eiffel Tower. He also updated Activision's address. The tilesets themselves are digitised photographs, are beautifully detailed and have a host of great sounds and clever animations. For example, the leaning Tower of Pisa collapses, waves roll in to a Tropical beach. But half the fun is finding these for yourself. If you want them, send $15 to Brodie Lockard at P.O. Box 3031, Stanford, CA 94309-3031.

Oh, go and buy Shanghai II — you may regret the time you spend on it, but you'll love it.

Darwin's Dilemma 2.0 is from InLine Design

Graphics	♣♣♣
Sound	♣♣♣
Addictiveness	♣♣♣♣
Overall	♣♣♣♣

Shanghai II The Dragon's Eye is from Activision

Graphics	♣♣♣♣♣
Sound	♣♣♣♣♣
Addictiveness	♣♣♣♣♣
Overall	♣♣♣♣♣

(You can guess I liked it, can't you?)

Railroad Tycoon

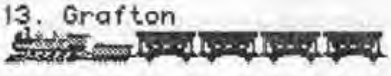
Casey Jones rides again. **Peter Kemp** steps on to the footplate...

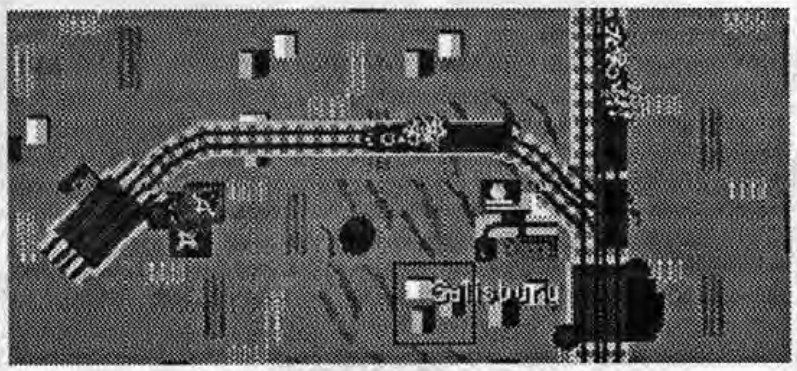
For many of us, 1968 marks the end of civilisation as we knew it — the year in which British Rail withdrew the last steam locomotives from active service. This might have been a good business decision, but for generations of children brought up on tales of Thomas the Tank Engine, the magic went out of our lives. Fret no more. Relief is at hand in the shape of "Railroad Tycoon" from Microprose.

Budding Fat Controllers have the opportunity to run a railroad — starting from scratch and trying to stay one step ahead of the competition for the next hundred years. Geographically, the game covers both North America, Europe and Great Britain but although the general geography is accurate, the detailed maps (covering terrain, rivers and the like) are generated for each game, to ensure a fresh challenge. The game is brilliantly animated, with aerial views of the locomotives chugging along the rails, ticking over in sidings waiting for other trains to overtake and the level of detail is such that it shows (without needing to refer to the status screens) whether the freight cars are more than 50% full...!

Starting with a modest budget (which depends on the level of difficulty chosen) the player lays his track (paying for each section as he goes) and then builds and starts to run his first trains. In the early days, money can be made simply by transporting coal from a depot in the middle of nowhere (near to a coal mine) to a town willing to pay for the stuff. As time progresses, and towns start to grow in size, then different demands start to emerge — passenger and mail traffic, for example. These pay rather better than freight, but speed is of the essence, so the player has to start scheduling his trains to ensure the time-critical traffic gets the right priorities.

There are over twelve types of cargo to be carried (each with their own type of railway car) and all manner of ways in which they can be converted and increased in value. For example, coal can be delivered to a steel mill which is then converted to steel. This steel can then be delivered to a factory and converted to armaments which can then be delivered to a harbour (ready for export). So even if town's demand for coal diminishes, the coal can still be put to profitable use.

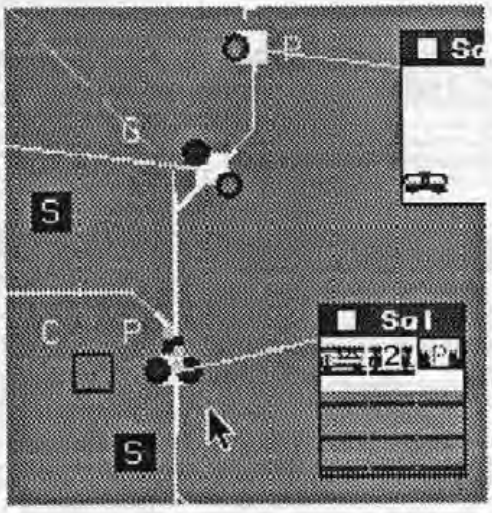




As time marches on, trains wear out (especially if not maintained properly) and the player has to start juggling with decisions about replacement with more efficient (but costly) locomotives — and which locomotives to buy and on what routes to use them. Is it worth consolidating two passenger services with an ultra-fast locomotive and introduce an extra stop? Perhaps I should duplex track at this junction to reduce the congestion? Should I build a silo at this station to store surplus grain when supply exceeds demand?

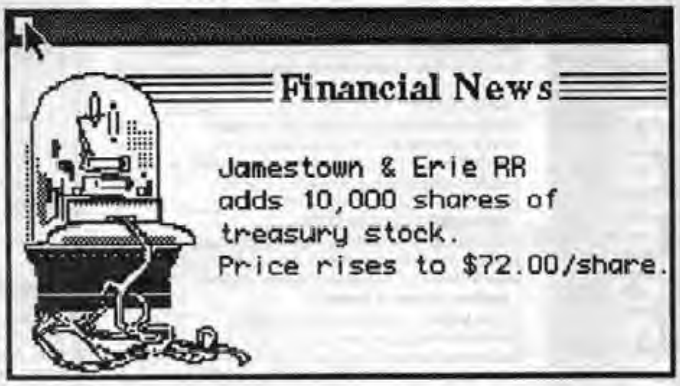
And so the questions continue to pile up. The great strength of the game is that there are no "right" answers. There are sound business decisions of course, as well as suicidal ones, but what was right in a previous game may not be right for this one — it all depends on what your competitors are doing. Oh, didn't I mention them? Silly me. Depending on the level of difficulty that the player chooses at the start of the game, the computer will operate five other competing companies with attitudes ranging from benevolence through to downright viciousness — these guys can play really mean! It's perfectly legitimate to try and bankrupt a competitor by connecting to his routes and offering to carry goods (either freight or passengers) at lower rates, because if you can supply the town more effectively than your competitor, you're likely to be granted the local franchise and your competitor banished to the wilderness. (Of course, he can do the same to you — all's fair in love and war!)

The game originally started out as a train scheduling simulator, but it was decided to broaden the appeal by turning it into a "game" and in my opinion Microprose has got its hands on a winner. For wimps like me, the game will automatically schedule the different types of rail traffic to ensure optimum service — I have enough difficulty deciding which trains to run without all the hassle of running the signals as well. But for some people, that's the real fun of the game — and who am I to argue? The important point is that the game allows both types of player to get their fun.



The game is not physically protected (although there is a train silhouette to identify at the start of each game). It requires 1Mb for monochrome and 2Mb for 8-bit colour and comes on two 800K disks with installation on your hard disk being the usual doddle. The program documentation is excellent, with a 178 page booklet (for all versions) describing the program, a tutorial and a potted history of the Age of Steam. The Macintosh-specific details are covered in an additional 14 page booklet, together with two cards showing how the various economies run (and which resources can be converted into what).

Railroad Tycoon is more than just a simulation. It is a simulator which has been harnessed to provide the driving force behind a thoroughly enjoyable game. The perpetually changing requirements of the towns and cities — to say nothing of the impact of the competition — mean the player is constantly adapting and refining his empire in order to stay in business.



There is a wealth of information available at all times, including the company's balance sheet, the profit and loss accounts for each locomotive, the manifest and position of each locomotive out on the network and a number of views of the track layout — on a progressively smaller scale, to handle the size of network that will evolve over a hundred years.

This game is destined to become a classic (if it's not there already). If you thought Sim City was "OK", but ultimately rather pointless, then this game has an extra spark that will probably make it appeal to you. If you've ever hankered after a train set for your second childhood, then I can't imagine they're going to come any better than this. Available for £27 from MacLine, I think it's excellent value for money.

Highly recommended.

Britain's oldest Macintosh mail order company MacLine

MacLine

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WORD PROCESSING

WP APPLICATIONS

MacWrite II (powerful yet straightforward WP) £145.00
Microsoft Word 5 (market leading WP heavyweight) £215.00
Nisus 3.0 (graphics, GREPS, macro language, 3200 undos) £215.00
Nisus Compact (best WP for PowerBooks & Classics) £89.00
Vantage (mini WP has extensive search/replace) £57.00
WordPerfect 2.1 (hot new version of famous PC WP) £199.00
Write Now 3.0 (fast straightforward WP, a doddle to use) £135.00

WP UTILITIES & AIDS

Acta 7.0 (stand alone and DA outliner) £79.00
End Note (bibliography database) £95.00
Expressionist 2 (create accurate equations) £85.00
Grammatik 2.0 (most powerful grammar checker) £79.00
Thunder 7 (single spellcheck & thesaurus for all apps) £59.00

DATABASES

RELATIONAL

4th Dimension (heavyweight of the databases) £595.00
Double Helix (no procedural language, for non programmers) £535.00
FileForce (easier to use and upgradeable to 4D) £250.00
Foxbase+Mac 2 (fast DB with great interface, reads dBase) £345.00
NuBase (DBase re-incarnated for the Mac) £175.00
Omnis 7 (powerful, flexible, Windows compatible) £899.00

FLAT

DAtabase (mini DB for quick convenient data access) £75.00
FileMaker Pro 2.0 (best flat file DB ever - everyone needs it) £225.00

INFORMATION MANAGEMENT

Address Book Plus (powerful with good print output) £69.00
Contact (in a compact window and easy to use) £49.00
DayMaker (best time/calendar manager for busy schedules) £79.00
DynoDex (best tool for managing/printing contacts) £59.00
QuickDex II (phenomenal rolodex card type database) £35.00
SuperQuickDex (includes powerful print capability) £55.00
TouchBase (networkable contact database) £89.00

BUSINESS

TIME/OFFICE MANAGEMENT

In Control (best to-do list manager has outliner, columns) £85.00
Smart Alarms multi user (fuss free net diary/reminders) from £125.00
Mail & Save (save up to 25% on large mail shots) from £275.00
Meeting Maker 5 user (workgroup diary for heavy schedules) £245.00
Now Up-To-Date (simple, quick calendar and reminder system) £59.00
WordPerfect Office (not to be outdone, WP strike back) ... from £95.00

SPREADSHEETS

BiPlane (excellent, low cost, full featured spreadsheet) £75.00
Lotus 1-2-3 (works with all PC & Unix versions) £275.00
Microsoft Excel 4.0 (leading spreadsheet, many great features) £225.00
Resolve (has HyperScript, consistant Claris interface) £235.00
WingZ (includes charting, draw and scripting) £245.00

SPREADSHEET BASED SOLUTIONS

Power Macros for Excel (shows off Excel's macro language) £25.00
Business Plan Toolkit (Excel based budgeting and forecasting) £69.00
Sales & Marketing Toolkit (comprehensive forecasting) £110.00

BUSINESS GRAPHS & CHARTS

Cricket Graph (original colour graphing program) £110.00
DeltaGraph Pro (popular, varied 2D & 3D graphing tool) £175.00
GraphMaster (very good and system 7.0 savvy as well) £180.00
KaleidaGraph (graphs, data analysis, stats tool with formulas) £149.00

INTEGRATED SOFTWARE

BeagleWorks (the latest entrant into the Works stakes) £195.00
ClarisOffice (Resolve MacWrite FileMaker MacDraw QuickMail) £495.00
ClarisWorks (market leader/software equivalent of super hero) £165.00
GreatWorks II (cheapest integrated product, has 6 modules) £120.00
Microsoft Works 2 (WP, DB, Comms, Draw, Spreadsheet) £125.00
Microsoft Office (Excel, Word, PowerPoint, Mail, bundle) £425.00

PROJECT MANAGEMENT

MacProject II (powerful, straightforward and flexible) £315.00
MacSchedule 2.5 (budget project scheduling) £125.00
Microsoft Project (full featured for most requirements) £365.00

ACCOUNTING

Classic Accounts (small business cash book /cash based VAT) £49.00
MacMoney 3 UK (best home accounts & budgeting package) £75.00
MYOB (fully integrated single user business accounts) £345.00
Path (best for small business, sales purchase nominal invoicer) £175.00
Ritz (powerful and comprehensive accts for smaller business) £340.00
Pegasus Entry Level (best package, grows with your needs) £375.00
EuroPay (popular payroll program) £275.00

PRESENTATION

Cricket Presents (established presentation software) £275.00
More III (best value extensive outliner/text/presentation) £89.00
Persuasion 2.0 (high end presentations with outliner) £255.00
PowerPoint (powerful, intuitive, easy interface) £189.00

GRAPHICS

PAINT & DRAW

Canvas 3.0 (high end draw/paint package using layers) £245.00
Cricket Draw III (updated at last) £185.00
Desk Paint 3.0 (excellent 24 bit paint and draw package) £99.00
MacDraw II (powerful, easy to use draw package) £145.00
MacDraw Pro (hugely powerful, doubles as presentation tool) £275.00
MacPaint II (the original Mac software) £85.00
MacCheese (super cheap 32 bit colour paint tool) £59.00
Painter (pressure sensitive 24 bit colour paint mimics oils etc) £225.00
Pixel Paint Professional 2.0 (32 bit, full featured) £475.00
Sketcher (grey scale version of Painter) £79.00
SuperPaint 3.0 (24 bit colour, paint & draw) £89.00
Studio 1 (unique animating mono paint package) £75.00
Studio 8 (full featured 8 bit paint program) £145.00
Studio 32 (32 bit version of the above, 5 mice review) £365.00
UltraPaint (knockout colour paint and draw program) £125.00

DARKROOM & RETOUCHING

Cachet (best colour correction software) £395.00
ColourStudio (powerful retouching, free Shapes) £315.00
ColourStudio (powerful retouching, free Shapes) £445.00
Colorit! 2.0 (PhotoShop capabilities without CMYK) £160.00
Image Studio (good value mono photo retouching) £145.00
PhotoShop 2.0 (pros choice, king of the image enhancers) £575.00

CAD & MODELLING

Clarix CAD 2.0 (flexible powerful 2D links to Filemaker) £525.00
Infini-D (leading 3D modelling & rendering tool) £495.00
MacRenderman (best dedicated 3D rendering tool) £545.00
MiniCad (professional 3D design & analysis) £455.00
Model Shop 2.0 (3D solid object modelling tool) £545.00
Ray Dream Designer (3D modelling & rendering) £595.00
Sketch (ground breaking new 3D drawing) £525.00
StrateVision 3D 2.0 (24 bit photo realistic rendering) £495.00
Swivel 3D Pro (24 bit colour models moving parts) £435.00
Virtus Walkthrough (draw in 3D and fly through the model) £295.00

POSTSCRIPT GRAPHICS

Freehand 3.1 (Professional PostScript drawing & text) £295.00
Illustrator 3.2 (Professional PostScript drawing, text & layout) £375.00
EPS Exchange (save Freehand files in Illustrator format) £89.00
Streamline (best PostScript auto tracing tool) £135.00

DESKTOP PUBLISHING

DTP APPLICATIONS

DesignStudio Special (budget DTP program) £120.00
Multi Ad Creator (specialised DTP for laying out adverts) £630.00
PageMaker 4.2 (one of the two major sellers) £475.00

NEW THIS MONTH

Connectix PowerBook Utilities enhances productivity and makes using your PowerBook even more convenient. It can extend battery life and has many other power features. There is a security and panic mode, Instant Wake is just that - no lag, keyboard shortcuts allow you to choose menu items with keystrokes, LCD screen saver, cursor enlarger and improved indicators and feedback about battery power make it great value.

CPU £49.00

Personal Press (entry level easy to use DTP) £89.00
Publish It Easy 2.0 (MacUser US best DTP winner) £89.00
Quark Xpress 3.1 (the other of the two major sellers) £475.00
Ventura Publisher (good for book production) £595.00

DTP AIDS & FONT MANIPULATION

LetraStudio (powerful headline font manipulation software) £225.00
TypeStyler (manipulates PostScript fonts) £139.00
TypeAlign (draw a wiggly line and type text, needs ATM) £67.00

FONTS

TYPEFACES

Adobe Fonts (all available) from £60.00
Adobe Type on Call (CD Rom of all the typefaces) £65.00
ATM Plus Pack (Adobe versions of rest of the Laser fonts) £110.00
Adobe Type Manager (smooths screen and print fonts) £59.00
Adobe Type Sets (collections of Headline fonts) from £79.00
Fraction Fonts (creates proper fractions) £45.00
Fluent Laser Fonts (120 excellent PS & TrueType fonts) £130.00

FONT FOUNDRIES & UTILITIES

Adobe Type Reunion (gives heirarchical font menus) £45.00
FontStudio (fab full featured font foundry from Letraset) £295.00
Fontographer 3.5 (most professional PostScript font creator) £295.00
FontMonger (converts Type 1 & 3 to TrueType) £69.00
Metamorphosis Pro (converts Type 1 & 3 to TrueType) £95.00

PC COMPATIBILITY

Access PC (read/write PC floppys from your Mac) £49.00
Daystar LT200 (LocalTalk card for PC) £175.00
DOS Mounter (same as above) £69.00
MacLink Plus (best Mac/PC link with100's translators) £135.00
Soft PC Universal (CGA PC emulator with DOS on a Mac) £155.00
Soft PC Entry Level (for LC and Classic users) £99.00
Tops Flashcard (LocalTalk card for PC works with Tops DOS) £130.00
Tops DOS 3.0 (PC version of Tops for Apple networks) £145.00

COMMUNICATIONS

SOFTWARE

AppleLink (subscribe to Apple's worldwide database) £95.00
Classicom (cut down version of Vicom, accesses Prestel) £75.00
Microphone II (power comms program) £210.00
Vicom Connect (UK package easy to use and powerful) £140.00
White Knight (very powerful but complex) £69.00

HARDWARE

DoveFax (excellent send & receive fax and modem) £185.00
TelePort FaxModem (send only 9600fax, 2400 modem) £170.00
TelePort FullFax Modem (send and receive, as above) £245.00
WS3000 V22 BIS (rock solid 2400 BAUD modem) £155.00
Courier HST dual standard (9600 BAUD, very fast) £545.00
Courier V32 (9600 BAUD, fast) £435.00

NETWORKING

SOFTWARE

Carbon Copy (control network/remote screens unltd users) £225.00
GraceLAN 2.0 (corny name, excellent network analysis) £245.00
Liason (print router network dial in software bridge) £245.00
QuickMail 2.5 10 User (powerful flexible E-Mail) £299.00
Timbuktu 4.0 (control networked Mac screens in colour) £85.00
System 7.0 (the time to upgrade is now!) £45.00

HARDWARE

Ariel (LocalTalk (AppleTalk) connector boxes) £22.00
MacNet (PhoneNet connector boxes) £19.00
Ethernet Boards (thick, thin or twisted pair versions) from £125.00
LocalTalk (Apple branded connector boxes) £45.00
LanRover/L (for remote network dial in) £495.00
NetBridge (bridge networks for extra speed, integrity) £365.00

HARDWARE

INPUT DEVICES

Gravis MouseStick ADB (perfect for Flight Simulator) £59.00
Extended Keyboard (15 function keys, numeric pad) £89.00
External Floppy Drives (800K and 1.44Mb) from £195.00
Calcomp Graphics Tablet (pressure sensitive inc. Painter) £675.00
Wacom A5 Graphics Tablet (best pressure sensitive) from £495.00
Logitech MouseMan (small alternative mouse) £69.00
MacMike (microphone and software for Macs without mikes) £42.00
MacRecorder Pro (high quality mike with sound editing) £135.00
Optical Mouse (no ball to get dirty and stick!) £69.00
Voice Digitiser (quality mike) £99.00
Voice Navigator II (sophisticated voice recognition) £495.00

ACCELERATORS, CHIPS and BOARDS

SIMMs Memory Upgrades see memory box
Brainstorm (more than doubles the speed of a Plus) £175.00
Math Co-Processor (speed up your Classic or LC) £55.00
New Life (25Mhz 030 accelerator for Mac Plus and SE) £725.00
New Life Classic (16Mhz 030 accelerator for Mac Classic) £525.00
PowerCache (33Mhz 030 for Mac II and LC) from £452.00
TokaMac ELC25 (blinding 040 accelerator for the LC) from £645.00
VRAM Mac LC & Quadra (adds more colours) from £55.00
Radius Rocket (faster than an FX, 25Mhz 040) from £995.00

ACCESSORIES

Cables call
Apple 13" Monitor Tilt & Swivel Stand £75.00
Mouse Mat (speed pad - white with MacLine logo) £6.00
Dust Covers (integral keyboard and CPU cover for most Macs) £9.00
Wrist Rest (eases possible injury problems) £15.00
Anti Glare Screens (eases eyestrain) from £35.00
Security Cable System (is your Mac vulnerable to theft?) £35.00
SE/Plus/Classic Tilt & Swivel stand (a bargain) £24.00
Mac Carry Bag (Plus, SE, Classic and LC/12") from £40.00
PoweBook Carry Case (Apple's own brand) £45.00
Toolkit (necessary to open Plus, SE or Classic) £10.00

PRINTERS

Canon CLC10 (colour copier, scanner and printer in one!!!) £3995.00
ColorMaster Plus (Postscript A3 colour ribbon high quality) £4995.00
GCC PLPII (great laser printer at a great price) £595.00
GCC BLP Elite (low cost PostScript laserprinter) £1075.00
GCC BLP IIS (twin bin PostScript laserprinter) £1795.00
GCC WideWriter (larger than A3 bubble jet) £1599.00
HP DeskWriter (superb inkjet, new low price/Appletalk) £325.00
HP DeskWriter C (great budget colour inkjet) £445.00
HP Laserjet IIIP (includes Postscript and Localtalk) £1295.00
Kodak Diconix (perfect for PowerBooks) £795.00
LabelWriter II (mini thermal printer produces sticky labels) £199.00
LaserMaster Unity (1000dpi A4 mono printer) £4795.00
LZR 960 (PostScript level 2, really quick A4) £1395.00
LZR 1560 (PostScript level 2, A3 and A4) £2395.00
Oki OL840 (PostScript laser printer at a great price) £1495.00
QMS PS410 (PostScript laser printer) £1295.00
Tektronix ColourQuick (great value and quality) £1995.00
Tektronix Phaser IIPXE (high quality colour) £3795.00

PRINTER SOFTWARE

PowerPrint (driver and cable for HP/Epson laser printers) £125.00

MacLine Policy

*Credit cards will not be charged until the order is shipped.
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*All goods are sent by a courier service. A signature will be required on delivery.
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*Defective software is replaced immediately.
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*Prices are correct at the time of going to press. E&OE.

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*Government depts, Ed.establishments and Plc companies are welcome to purchase with an official order subject to status.
*International orders accepted with credit card only. Shipping added at cost.

Freedom of the Press Light (mono printers version) £65.00
ShadowWriter 2.0 (networks most serial printers!) £59.00

DATA STORAGE

50 Mb drive (d2 Quantum 17ms access) £275.00
105 Mb drive (La Cie Quantum 17ms access) £365.00
210 Mb drive (Qisk Seagate 15ms access) £525.00
240 Mb drive (La Cie Quantum 17ms access) £585.00
520 Mb drive (Qisk Fujitsu 12ms access) £895.00
630 Mb drive (d2 Seagate 15ms access) £1295.00
Teac Tape Backup 150 Mb (Qisk) £595.00
DAT Tape Backup 2 Gb (Qisk) £1195.00
Optical Floppy Disk Drive 128 Mb (Panasonic) £995.00
CD ROM Drive (Hitachi or Toshiba) £395.00
45 Mb Syquest Removable Drive (including cartridge!) £355.00
Syquest Removable 45 Mb Cartridge £55.00

MONITORS

Pro Nitron 19" Mono system £795.00
Pro Nitron 19" Greyscale system £995.00
Pro Nitron Sony 20" 8 bit system £2295.00
Pro Nitron Sony 20" 24 bit system £2795.00
NEC MultiSync FG colour 14" to 21" ..... from £469.00
Panasonic Colour 14" (alternative to Apple 12" or 13") £255.00
Radius Pivot (unique tilt system) ..... from £650.00
Radius Colour Pivot (unique tilt system) ..... from £925.00
Raster Ops 20" 24 bit colour system £1895.00
PowerPage 15" for Classics and PowerBooks ..... from £765.00
Samsung 14" 8 bit colour system for SE30 ..... £495.00
Sony Trinitron 20" Colour Monitor £1995.00
Supermac 19" 8 bit colour system £1495.00
Supermac 19" 24 bit colour system £1795.00
Supermac Colour 17" Monitor £795.00

SCANNING

Agfa Arcus (1200dpi, fast, includes transparency unit) £3495.00
Animas Colour Hand Held (24bit colour, up to 400dpi) £475.00
CatchWord (OCR software from Logitech) £175.00
FotoMan (greyscale camera image grabber) £445.00
Microtek 600ZS (great quality low cost colour 600 dpi) £995.00
Ofoto (best greyscale scanner control software) £175.00
OmniPage Pro (best OCR currently in existence, needs 4Mb) £625.00
OmniPage Direct (OCR directly into applications) £375.00
ScanMan (best selling handheld 256 greys, 400dpi) £165.00
ScanMan OCR (scanner with CatchWord software) £275.00
ScanJet IIC (400 dpi HP colour scanner with PhotoShop) £1395.00
Scan XPert (scans up to to 1500 dpi/256 greys) £950.00
Typist (handheld with best built in OCR, needs 4Mb) £435.00

PROGRAMMING

AppMaker (automatically generates interface code in C) £225.00
Frontier (first Finder level scripting system for the Mac) £195.00
ProGraph (OOPS & visual prog without procedural code) £245.00
QuickBasic (excellent budget Basic) £55.00
SmallTalk V (best version of the definitive OOPS language) £139.00
Think C 5.0 (the leading Mac app development tool by far) £125.00
Think Pascal 4.0 (excellent developer level compiler/debug) £125.00
True Basic (Basic language suited to education development) £69.00

UTILITIES & DAs

FILE & DISK MANAGEMENT

911 Utilities (the pro's file & disk recovery tool) £69.00
AutoDoubler (automatic transparent file compression) £59.00
Complete Undelete (recover trashed documents) £39.00
ClickChange (interface customisation) £47.00
Crash Barrier (intercept crashes to save data) £49.00
DiRectory (best floppy and/or hard drive file logger) £59.00
Disk Express II (best hard drive defragmenter) £55.00
DiskDoubler (file compaction to save space) £59.00
Disk Top 4 (powerful DA finder) £59.00
File Director (includes famous DiskTools and 6 DAs) £75.00
Frontier (allows "programming" of the Finder and more) £195.00
HandOff II (no more "application is busy or missing") £69.00
Hard Disk Toolkit (the best formatter and checker) £115.00
Help! (sorts out clashes and crashes) £65.00
InitInfo (book and stack about Init Clashes) £29.00
InitPicker 2.0 (choose to use or disable your startup Inits) £35.00
MacTools 2.0 (backs up, recovers, optimizes, repairs drives) £89.00
Norton Utilities 2.0 (best selling utilities now includes SUM) £115.00
Now Utilities 4.0 (8 essential utilities) £79.00
On Cue II (launch apps and documents from menu bar) £55.00
On Location (lightning fast file location) £85.00
Power Utilities (Disk Express and other great utilities) £79.00
Shortcut (extra commands in open dialogue box) £49.00
SilverLining (popular disk formatting utility) £99.00
Square One (terrific icon based application launcher) £32.00
SuperDisk (file compression) £59.00
TimesTwo (automatically doubles disk space) £99.00

SECURITY

A.M.E. (very sophisticated data security for system 6 only) £195.00
Citadel (lock your info from prying eyes) £69.00
DiskLock (lower price hard disk, files & folder security) £105.00
Empower I (file & data security) £120.00
Empower II (sophisticated file & data security, encryption) £225.00
FolderBolt (lock up folders simply and effectively) £65.00
MacSafe II (file security with encryption) £95.00
FileGuard (data encryption) £145.00
Nightwatch (hard disk security) £75.00

BACKUP & VIRUS PROTECTION

AutoSave (saves your work at user determined intervals) £29.00
Backmatic (for those who hate backing up) £55.00
DiskFit Pro (reliable low cost backup) £72.00
DiskTwin (constant HD duplication security) £595.00
FastBack II (very fast and compact) £105.00
Mac Bac (simple and efficient backup for System 7 only) £49.00
Redux (best value backup program on the market) £59.00
Retrospect (most sophisticated archivel backup) £130.00
Retrospect Remote (THE solution for network backup) £225.00
SAM 3.0 (Symantec's anti virus utility) £69.00
Virex 3.8 (best virus tracer & eradicator of all!) £49.00

PRODUCTIVITY ENHANCERS

After Dark 2.0 (famous screen saver with many modules) £25.00
More After Dark (25 new modules inc cult Lunatic Fringe game) £20.00
After Dark/More After Dark Bundle £35.00
Calculator Constructor 2 (create custom calculators) £49.00
Calendar Creator Plus (customise your own calendars) £59.00
Calendar Maker (CE Software's version) £35.00
CPU (excellent collection of PowerBook utilities) £49.00
DynoPage (allows printing of anything to filofax paper) £59.00
easyPrint (no more Chooser for selecting printers!!) £23.00
easyPrint 10 Pack (no more Chooser for selecting printers!!) £65.00
Exposure Pro (screen dump utility with paint tools) £82.00
First Things First (alarms, reminders, to do's) £45.00
Hyper DA II (read HyperCard files from a DA) £79.00
Master Juggler (best font menus, sounds and F Keys manager) £35.00
Maxima (access more than the 8Mb limit of RAM) £85.00
MultiClip 2.0 (multiple cut copy cut paste paste paste) £65.00
Now Up-To-Date (calendar and reminder system) £59.00
QuicKeys 2.1 (macro maker, time saver utility) £89.00
QuickDex II (lightning fast DA database, essential) £35.00
SuperQuickDex (with added printing capabilities) £55.00
Screenshot (low cost full featured screen dump utility) £35.00

MEMORY

£25.00

SIMM	1Mb SIMMs 80ns	£25.00
SM2S	2Mb SIMMs 80ns	£59.00
SM4M	4Mb SIMMs 70ns	£89.00
SP02	PowerBook 2Mb	£125.00
SP04	PowerBook 4Mb	£210.00
SP06	PowerBook 6Mb	£325.00

Stepping Out 2 (your little screen is a window to a big one) £59.00
Smart Alarms (easiest quickest reminder/diary system) £49.00
SmartScrap & Clipper (enhanced scrapbook) £49.00
Snooper (hardware fault diagnosis for all Macs) ..... from £150.00
stopWatch 3.0 (client & project time/activity monitoring) £85.00
Stuffit DeLuxe (famous file compression program) £69.00
Suitcase 2.0 (manage your font menus sounds and F Keys) £49.00
SuperSpool (best ImageWriter spooler) £59.00
SuperLaserSpool (Laser & ImageWriter spooler) £85.00
Talking Moose (not a productivity enhancer) £23.00
Tempo II (powerful macro maker) £99.00
The Far Side Calendar (the diary with the cartoons) £55.00
WallPaper (beautify the boring desktop background) £39.00
windoWatch (logs time usage of windows) £85.00

ENTERTAINMENT

ARCADE

✔**Aqua Blooper** (fit pipes together before it floods) £29.00
✔**Armor Alley** (helicopter shoot em up) £36.00
✔**Beyond Dark Castle** (more of the classic game) £31.00
✔**Blade** (arcade adventure kill or be killed) £65.00
✔**Crystal Quest 2** (Britain's favourite game) £29.00
✚**Dark Castle** (the classic Mac game and still popular) £31.00
✔**Diamonds** (the most addictive game yet) £29.00
✔**Faces** (from the Tetris people) £24.00
✔**Glider** (fly a glider through eerie house, great fun) £29.00
✔**Harpoon** (naval game) £39.00
✔**Indiana Jones** (wonder what this one's about?) £29.00
✔**Mission Starlight** (addictive space shoot-em-up) £29.00
✔**Mutant Beach** (adventure type, great graphics) £39.00
✔**OIDS** (addictive space shoot-em-up with editor) £25.00
✔**Prince of Persia** (brilliant animation graphic adventure) £35.00
✔**RoboSport** (the thinking man's shoot-em-up) £37.00
✔**Sky Shadow** (shoot 'em up from the Crystal Quest author) £29.00
✔**Spectre** (brilliant tank battle game) £35.00
✔**Spectre LAN Pack** (3 user pack for network battling) £59.00
✔**Splat'ers** (paintball arcade and strategy game) £39.00
✔**Tetris** (award winning colour Soviet game) £24.00
✔**SuperTetris** (if you liked Tetris, well..) £29.00
✔**Wordtris** (Tetris with words) £24.00
✔**Wolftris** (3 Dimensional Tetris, could drive you insane) £24.00

SIMULATIONS

✔**The Cycles** (excellent motorcycle racing sim) £27.00
✔**Falcon 2** (exciting & networkable flight simulator) £34.00
✔**Fast Break** (exciting basketball game) £29.00
✔**Ferrari Grand Prix** (formula one racing simulation) £35.00
✔**Fokker Triplane** (World War One flight simulator) £29.00
➢**Hellcats** (WWII F6F flight simulator, best graphics) £39.00
✔**Life and Death** (be a doctor, perform actual operations!) £24.00
✔**MacSki** (get in shape for the slopes!) £42.00
✔**Microsoft Flight Simulator** (serious, realistic, accurate) £35.00
✔**Scenery Discs** (Europe, Pacific, Mid West, East Coast) ..... each £22.00
✔**Mustang P51** (fighter plane simulation) £35.00
✔**Net Trek** (multi player network space game) £39.00
✔**Patton Strikes Back** (Battle of the Bulge) £29.00
✔**PGA Golf** (far and away the best Golf game) £27.00
✔**PGA Golf Extra Courses** (3 more course for PGA Golf) £15.00
✔**Railroad Tycoon** (run a Wild West railway company) £27.00
✔**Sim Ant** (control an ant colony) £29.00
✔**Sim City** (design and run your own city) £27.00
➢**Sim City Colour** (design and run a colour city!) £32.00
✔**Sim Earth** (design and run your own planet) £34.00
✔**Starflight** (space thriller) £29.00
➢**Tristan** (the only Pinball game for the Mac) £39.00
✔**The Duel:Test Drive** (race your Porche round California) £32.00
✔**Universal Military Simulator** (the classic war game) £27.00
✔**Vette** (race a Corvette through San Francisco) £34.00

STRATEGY

✚**Ancient Art of War** (Sun Tsu's high quality war simulation) £26.00
✚**Ancient Art of War at Sea** (sustaining version of above) £26.00
➔**Balance of the Planet** (save the environment and world) £32.00
✔**Darwins Dilemma** (based on the process of evolution) £29.00
✔**Guns & Butter** (run your own country) £27.00

ADVENTURES

✔**Mission Thunderbolt** (huge graphic/text adventure) £29.00
✔**Pirates** (swashbuckling graphic adventure) £21.00
✔**Pirates** (swashbuckling graphic adventure) £21.00
✔**Rise of the Dragon** (futuristic "Blade Runner" Scenario) £35.00
✔**Secret of Monkey Island** (pirate era swashbuckler) £35.00
✔**3 in Three** (puzzles and riddles from Cliff Johnson) £29.00

BOARD GAMES

✔**Battle Chess** (animated and powerful game) £25.00
✔**Bridge** (from novice to advanced playing levels) £24.00
✔**Casino Master** (Roulette, Blackjack, Poker, Baccarat, Craps) £34.00
✔**Chess Champion** (best Chess game) £25.00
✔**Go Junior** (award winning version of famous game) £19.00
✔**Go Master** (stronger play and training modules) £45.00
✔**Ishido** (award winning oriental Go/Mah Johng style) £32.00
✔**Shanghai II** (great graphics, addictive brain teaser) £25.00
✔**Stratego** (award winning classic war game) £27.00
✔**Tesserae** (colour matching mind stretcher) £29.00

KEY Works on :- ✚ Plus, SE only, ➔ Plus, SE, II
✔ Plus, SE, II, CX and SE30, ➢ Colour Macs only

Many games do not work on the CI, FX, Classic, SI, LC, Quadras and the new PowerBooks.
Please enquire before ordering games to run on these machines.

BOOKS & TRAINING

Big Mac Book £27.45
Canned Art £27.50
Canvas 3.0 The Book £19.95
Collier's Rules for DTP £14.95
Complete Book Of Mac £23.00
Danny Goodman's Macintosh Handbook £27.95
Dr. Mac 2nd Edition £20.95
DTP by Design £23.95
Excel 3.0 Made Easy £15.95
Illustrator 3.0 Complete £22.99
Inside Mac Vol 1, 2, 4, 5 ..... each £23.95
Inside Mac Vol 3 ..... £19.25
Inside Mac Vol 6 ..... £34.95
Inside AppleTalk £30.55
Inside Mac X-Ref £10.95
Inside the Apple Macintosh £19.95
Little Mac Book £13.95
Macintosh Family Hardware Reference £23.35
Mac Revealed 1 - 4 ..... each £23.95
Macintosh Bible 3rd Edition £26.00
Macintosh Bible System 7.0 Book £12.95
Macintosh Bible "What do I do now" book £12.95
Macintosh Font Book £21.99
The Mac is not a Typewriter £8.95
Mac Classic Book £22.95
Real World FreeHand £24.99
Mastering PageMaker 4.0 ..... £22.50
Official PhotoShop Handbook £24.99
PageMaker 4.0 Made Easy £19.95
ResEdit Reference £13.45
System 7.0 Book £20.95
Using FileMaker Pro £22.95
Using Microsoft Word 4 ..... £20.95
Using Quark Xpress 3.0 ..... £18.95
WordPerfect 2.0 for the Macintosh £22.95

TRAINING

Typing Instructor Encore (good training from basics to touch) £25.00
MacTeach (specify Mac) (audio/disk training) ..... each £55.00
Personal Training ..... 4 to 6 modules per app, each module £49.00
(audio cassette application training for: New Mac Users, Upgrading to System 7.0, PageMaker 4.2, Xpress 3.1, Works, Word 5.0, Excel 3.0, Persuasion, Illustrator, FreeHand, FileMaker, Claris Works and Lotus)

MacLine Britain's first Macintosh mail order company

Warlords

Peter Kemp reports on the latest in wargaming from a land of empires, castles, armies, heroes, monsters and dragons.

It's all too easy to forget that good game software doesn't only come from North America — and Strategic Studies Group, based in Australia, is living proof of this. As the name implies, they're not in the business of shoot-'em-ups, nor adventures in the Zorkian sense. Instead, they have concentrated their talents on producing a number of excellent wargames which are renowned for their sophistication, playability and attention to historical detail. With the exception of 'Reach for the Stars' (an interstellar trading/warfare game) the company's output so far has been based on historical events, with a particular bias towards the American Civil War and tank battles from World War II.

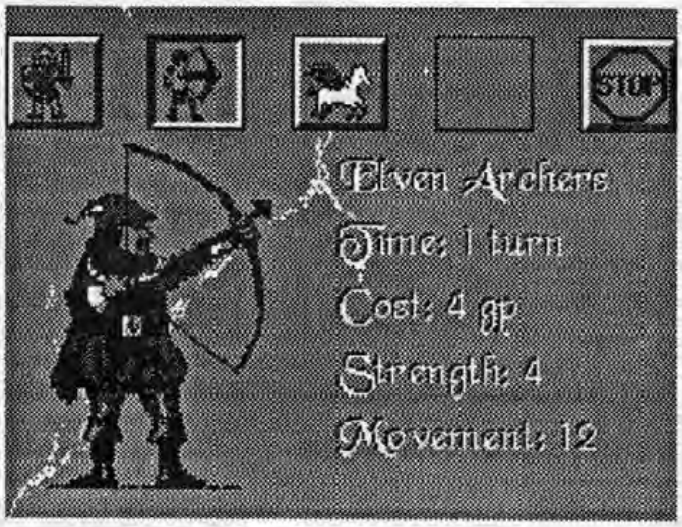
Until now, that is, because SSG has introduced 'Warlords' — an eight player wargame in a land where archers and daemons are but footsoldiers in the service of whoever pays them. (Don't be intimidated by the number of players, by the way — the machine will take any parts not run by humans.)

The game will run on every Mac from the Plus to a Quadra and needs 6.0.2 or higher. If you're running System 7 then you'll need 2Mb for Black and White or 4Mb for colour. As always, there's a trade-off between colour and speed, but if you've got it — flaunt it! (The game package also comes with a third disk which contains a stack with information on of all of SSG's games. Why don't other suppliers do this, I wonder?)

The game is based on the struggle for power in the Kingdom of Illuria, which is divided up into eight (roughly) equal areas, each under the predominant control of one bunch of ne'er-do-wells or another. The player has his choice of which particular group to control — they each have their strengths and weaknesses, so it's not a straightforward decision. The game normally begins with a race to 'influence' (i.e. invade, conquer and subjugate) all non-aligned castles in order to harness their production capabilities for one's own war efforts. Each castle can produce different types of soldiers, each with their own characteristics. It takes time and money to produce (and maintain) these armies, so the player has to work out what's going to be needed (and when) and plan accordingly — troops which can move easily through the forest are great for sneak attacks, but don't have the stamina required for a siege, for example.

Of course, no game would be complete without a hero or two and guess what? Yes, the player gets to control one or more officially designated heroes during the game. Heroes are special characters with enhanced characteristics who can explore ruins, consult oracles and even recruit the undead to their master's cause. If they are able to find (and keep) certain artefacts, these can enhance their powers — perhaps even sufficient to tilt the balance of power in an otherwise lost battle. Heroes are expensive (it's a risky business, which means payment in advance!) and they only offer themselves for hire once in a while, but the player who has more heroes under his control is more likely to win.

The geography of the game is such that — unlike Risk, for example — there is no easy way to 'seal off' an area, build up resources and then sally forth, sweeping all before oneself. The most successful tactic I've found so far is to go hell for leather against a nearby opponent and try to eliminate him — hoping, all the while, that all my other opponents are too busy arguing among themselves to



notice me... It seems to be fairly successful to date, but I see from the victory conditions that there are circumstances where all the remaining opponents will band together until the human player is eliminated or until they perish from the earth. This isn't going to be easy!

Combat is fairly straightforward (and well explained in the game's documentation), but weighted towards 'Quality rather than Quantity', so it doesn't do to allow one opponent to get too far ahead in the sophistication stakes. This isn't a game where sheer weight of numbers will win, although cannon fodder is sometimes required in order to ascertain an enemy's strength in a location. That said, even a band of lightly armed soldiers operating behind enemy lines can cause havoc, so it usually pays to leave a moderate garrison in each castle. (Of course they'll want paying, so if you're like me, you'll tend to make the garrison too small — until the aforementioned guerilla army turns up, that is, and you'll wish you'd made the garrison a teensy bit bigger...!)

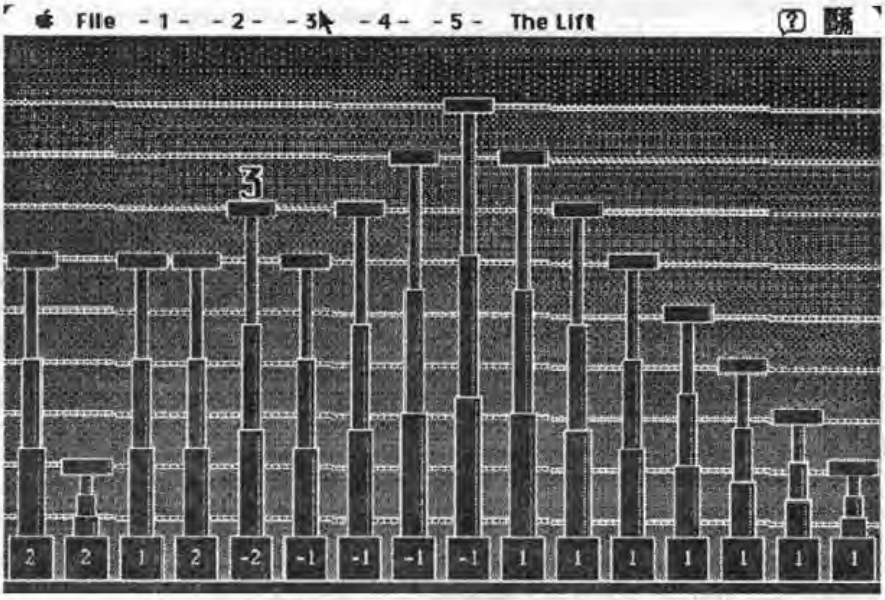
I reviewed some of SSG's other wargames about twelve months ago. What I said then still applies — if you like games that make you think (and you're not after the instant gratification of an arcade game) then 'Warlords' is well worth your attention. In particular, a big plus point is the 'artificial intelligence' which is built into the game. As you get better, you can choose increasingly sophisticated opponents — and if the calibre of the 'easy' opponents is anything to go by, it'll be a long, long time before the game runs out of oomph!

I bought my copy of the game mail order from the US, but it should now be available from the usual UK suppliers In case of difficulties, it can be purchased direct from SSG. If you're on Compuserve, drop them a line at 72040,34 ('SSG' on Genie, or AUST0161 on Applelink).

3 in Three

Peter Kemp invites you to a world where 'Numbers don't count'...

If you remember "The Fool's Errand" or "The Puzzle Gallery" (or recognise the name Cliff Johnson) then go straight to the 'where to buy' information at the end of this review. Otherwise, read on...



With the by-line "Ever wonder what really goes on inside that computer of yours?", Cliff Johnson and Inline Design have come up with a marvellous collection of puzzles that is guaranteed to keep even the most blasé of games addicts quiet for many hours.

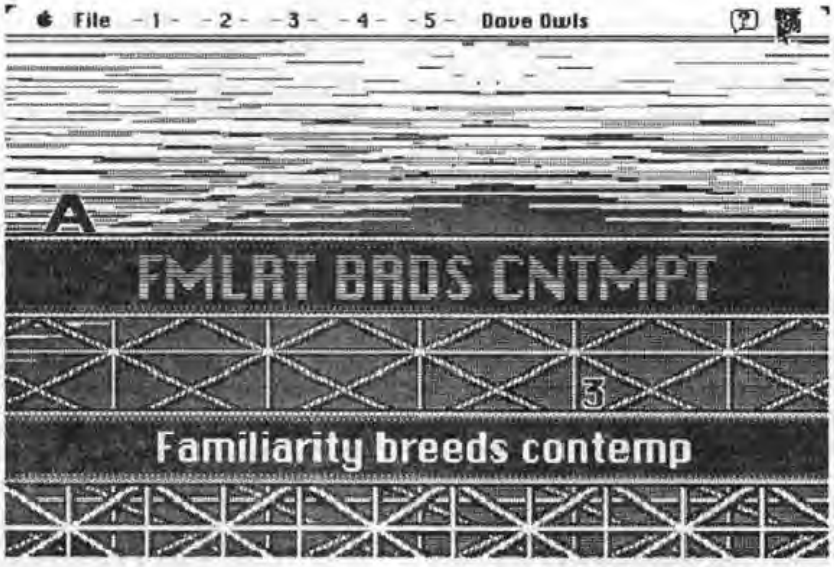
The game starts off with an extended (and quite inspired) piece of animation, charting the effects of a power surge which cause the number 3 to fall out of a spreadsheet and tumble into a land where numbers don't count (geddit?) and the letters spell disaster (as in d.i.s.a.s.t.e.r. Believe me, it gets worse!)

Broadly speaking, the puzzles fall into the main headings of word puzzles, logic puzzles and brain twisters. Within each group, there are any number of variations on a theme which are sufficiently different to ensure you never get bored. As each puzzle is solved, the next puzzle is introduced with a snippet of animation that is genuinely amusing or witty (or both!).

Some puzzles are obvious and some aren't. (Although it might not always be clear what needs to be done, that's part of the puzzle and hints are available, both on-line and in the manual. But don't be deceived — just because you can get a hint, that doesn't necessarily make the puzzle easier to solve. After all, the principle of Rubik's cube is simple, but the practice is something else!)

The game has over eighty puzzles to be solved, although not all of them can be started at the beginning of the game — but at any one time there are usually half a dozen available for tearing your hair out over. (I know that's a poor sequence of prepositions, but you get my drift...) The game makes good use of animation (and colour on suitably equipped machines) and is refreshingly smooth and free of 'flicker'.

Don't attack this game in the expectation of solving it one go. Some of the problems are very easy — and some are very hard. What makes this game so much fun is that what's easy for me will probably be hard for you — and vice versa, so unless you've got a brain the size of a planet, you'll find some of the problems insoluble first time round. My suggestion is to show the game to other members of family and get them hooked on it as well. And when you're all stumped, compare notes — I'll bet a pound to a penny that you'll have cracked different puzzles and the pooled results will put you a lot nearer to restoring 3 to her rightful position in her spreadsheet. (If that doesn't make sense now, it will by the time you've watched the marvellous animated prologue to the game.)



This is not a game for those who don't have a sense of humour — and it's quite unsuitable for anyone who doesn't have a weakness for the odd pun. (With some emphasis on the 'odd'!) But for the rest of us, I reckon it's a 'must buy' at £29 from MacLine and other fine retail outlets.

(Inline Design is now being distributed in the UK by Softline, if there's any problem finding any of their games.) As with all of Inline Design's games, it isn't copy protected and will run on a Mac Plus or higher (System 6.0.5 or later is also required). The game consumes just under 900Kb of hard disk space and you'll need 1Mb of RAM for black and white or 2Mb for colour. Go and buy it now!

Correspondence Corner

Dear Dave , Elizabeth and Peter,

I really enjoyed the 'Fun + Games' section of the Apple 2000 magazine April '92. Besides really enjoying games for the][GS, I would love to know how these games are made! How about printing a game or demo we could key into a][GS so we could learn something while having fun? I realise this is a big undertaking but you could partition it over the year depending on the demo and the time it takes. I often wondered how those shoot em ups like Xenocide or Task force are made and how the characters are programmed. Even the intros are fabulous!

Of course this could only be interesting to some people, however, there's bound to be some interest in such an article or feature. This might have been done already, but since the magazine has been doing re-printed material, I finally find the magazine a bit more IIGS specific. I am not blaming anyone, I would love to see a tutorial style like GS Plus does.

Anyone want to tell us the must haves in the game world of the][GS before they're all gone with everything else and where to buy them!

Can you tell me where I can get Prince of Persia. I have seen it on the PC and it really has lovely animation and graphics. Also, can you tell me of any experiences you have had with PC games running on the PC transporter for the][GS? What is available that is compatible with the Transporter, and how does it look?

Keep up the good work, take care.

Paul O'Connor

Thanks for the kind words, Paul. You raise some interesting points about animation, but it's a big subject and as the group is probably coming to a close in its current form, there's no way we can put something together in what may well be the last issue. Maybe this could be picked up by one of the sub-groups as the subject for a workshop? I suggest you contact Peter Stark who will be driving the IIGS group. (One thought, though — I can't see animation being done in anything other than assembler (i.e. machine code) which is not the easiest language in the world on a machine as sophisticated as the IIGS. Perhaps there's someone out there who'd like help Paul out and to prove me wrong?)

Given the non-existent support by Apple for the IIGS in the UK — and the poor support by software dealers — I can't help with a supplier for Prince of Persia (or any other games for that matter). If you've got access to a modem and Compuserve, I suggest you enter some of the Apple II specific forums and pick up the names of those US-based companies handling mail order to the UK. And don't forget TABBS (MUST PAY!!!), Apple 2000's very own bulletin board — an ideal way of keeping in touch with other Apple II users. My gut feel is that PC games running on the Transporter are going to run pretty slowly (if at all) and you'll probably hit all sorts of compatibility problems. Again, I suggest this is something that you discuss with other users on the e-mail network. *P.K.*

CD Update

Some more news on the CD front. The latest version of the BMUG CD (Berkley Macintosh User Group) contains the best collection I've seen in a long while. If you're thinking of getting a CD player, then this (along with a Nautilus subscription!) should be high on your list. The group has even gone to the trouble of trying to ensure that all the "Read Me" files are in Teach Text format, rather than MacWrite II or something equally irritating. (I say that as a Word user. Please substitute vice versa if you're a MacWrite II user...) The US price is in the region of $60, so there should be some room to shop around in the UK where the asking price seems to be about £60.

A friend was good enough to lend me a spare copy of the Expo CD from the recent MacWorld exposition in Boston.

The disk is another excellent example of how to put a lot of information in front of people so they can pick and choose what they follow up. There are demonstrations from 22 major suppliers (providing 292Mb of applications), including a demo version of Adobe's Photoshop 2.0 — you can manipulate images but not save them — but what the hell, it still makes a great toy! And if you want QuickTime movies, this is the place to be — 72Mb of them, which should be enough to pass the odd wet afternoon!

Space Quest II hints and tips (from Paul O'Connor)

(Printed ever so small, so you won't read it by accident and spoil your pleasure!)

Walk to hovercraft. Look in hovercraft. Push button. Walk to guard. Search guard. Get keycard. N. E. Walk to creature. Untie rope. W. W. Get spore. N. Move through the roots maze without touching roots. Get berries. Walk through maze again. E. W. Hide behind bush when attack happens. Walk to mailbox. Put form in mailbox. E. E. Rub berries on self. E. Walk top center right. Hold breath. D. W. U. Get gem. Enter pool. Hold breath. E. U .E. E. Climb tree. E. E. Wait for darkness. Call guard. Wait till he is next to cage. Throw spore at guard. Get key. Unlock cage. Open cage. Get rope. N. W. W (avoid ship). Climb on log. Tie rope to log. Climb rope. Move to end. Swing rope. Let go on left side. W. Enter darkness. Hold gem. W. Get gem. S. Listen to dude. Say the word. Enter hole. Put gem in mouth. E. S. E. SE. S. W. W. Go S on far left. E. E. E. Go N on right. E. Blow whistle. Wait for it. Get out of the water. Throw puzzle at beast. Walk to hole in rock. Get rock. At the base of the tower, sneak under platform. Throw rock. Walk to elevator. Take elevator to top. Move behind shuttle. Open door. Push power button. Set dial to WBD. Push thruster. Pull throttle. Wait till out of atmosphere. Set dial to IBD. Push throttle. Wait till contacted. Wait till landed. E. Enter elevator. Look. Push three. Wait. Exit elevator. E. E. E. Push button. Enter closet. Look. Get plunger. Get out. E. E. E. Enter elevator. Push 4. W. W. Push button. Enter closet. Look. Get cutter. Leave closet. W. Go to door on left. Push button. N. Walk to third stall. Open door. Enter stall. Get toilet paper. Exit stall. S. W .W. W. Enter elevator. Push 5. E. E. E. Push button. Enter closet. Look. Get basket. Get overalls. Get lighter. Put paper in basket. W. W. W. Enter elevator. Push 1. W. S. Walk down stairs. W. E. Wait till acid appears. Stick plunger to barrier. Wait for floor to close. Let go. Drop basket. Burn paper. Wait for sprinklers. E. E. Climb stairs. Cut glass. Walk to vent. W. Walk to switch. Pull switch. Type enlarge. E. Enter glass. Search Vohaul. Look at screen. Type TITS. In the glass tube, look at box. Open box. Wear mask. E. S. W. W. Type PUSH BUTTON but don't hit enter. W. Move to button. Hit enter. E. E. E. E. E. Return to shuttle tube. Get in pod. Push button. Wait. Look. Walk to chamber. Open chamber. Get in chamber.

Odds 'n' Ends

Access DT

Where's the problem in the Mac games scene? Puzzles? No, there are plenty of those around (Shanghai II, Tetris...). There's no shortage of simulations or strategy games either! Well where's the problem? Arcade games! Let's take a look at what there is available; Oids (makes 'Space invaders' look up to date), Indiana Jones and the Spectrum graphics crusade, Dark (but non-system seven compatible) Castle, aarrgh! The list goes on.... There's some respite thanks to Spectre and Prince of Persia, but it'll take more than that to get a lot of attention for the Mac, thereby getting some decent games 'over' to the Mac. 'Over' he says. Surely he must be crazy! Copying from an inferior platform? I know your probably thinking that we should have our own games, I mean we're far superior to those, what do you call 'em, PC's aren't we? What people seem to forget is that the PC is almost as worthless on the Arcade front as we are. We need to get Amiga and ST developers interested in the Mac. I'm not saying we necessarily 'port' all the time, we should have some proper rewrites, but half the time the 'Mac only' games developers don't seem to realise how high the standards are on the so-called 'lesser' platforms (with the exception of InLine). So come on you software developers! We want some Arcade games!

Dave

Games Hints & Tips

by Lennox Beattie

In **Sim City**, typing in FUNDS while holding down shift gives you $10,000. Unfortunately this sometimes causes earthquakes, so do it before starting to build.

Also your citizens take time to react to tax increases so wait until December to raise them so as to attract more residents. Then reduce tax rate to zero in January and restore it to your maximum again in November or December.

In **PGA Tour Golf** some courses are easier than others. So it makes sense to start with the easier courses and work your way up. In my opinion, from easiest to hardest, the courses go:

Sterling Shores
Avenel
Sawgrass
PGA West
Scottsdale
Eagle Trace
Southwind

In **Grand Prix Circuit** the cars vary:

Ferrari	—	Low on power, but easy to control
Williams	—	A compromise between power and control
McLaren	—	Very powerful but difficult to control

The circuits vary too and so some cars suit some circuits better than others:

Circuit		Best Car
Rio	—	Williams
Monaco	—	Ferrari
Canada	—	Williams
Detroit	—	Ferrari
Silverstone	—	McLaren
Hockenheim	—	McLaren
Monza	—	McLaren
Suzuka	—	Ferrari

Vette is a great game, but if you are up against the computer opponent it helps to know that the easiest opponent is the Porsche, followed by the Testarossa, the Countach and the F40.

Flight Simulator

Now that Microsoft has delivered the new version of the Flight Simulator for the Macintosh, did you know that there are several scenery disks available from Mallard Software? Scenery upgrade no. III for example includes Great Britain as far north as Birmingham. (And you can even fly round the Eiffel Tower — myself, I don't have the skill to fly *under* it...)

There are four disks available:

I	—	Western New York, East Coast from Upper Pennsylvania to Florida, Lower Michigan, Ohio, Indiana and Illinois
II	—	Japan, Hawaii and Northeastern US
III	—	Entire U.S. East Coast and Western Europe
IV	—	Japan, Hawaii, Midwestern U.S.

from MacLine and other fine retail outlets at £22 each.

If this is the last issue, we won't be publishing any more 'Fun + Games'. But that shouldn't stop you writing about your favourite games — or offering hints to others. Keep in touch via TABBS [illegible] or The Liverpool BBS [illegible] — there's always someone out there with a better score than yours...!

Best wishes from Elizabeth, David and Peter.

Disk Express II Revisited

Mike Dawson takes a look at the new release (V 2.10)of a Hard Disk Defragmentation Utility

Having recently upgraded my Disk Express II hard disk optimization programme I thought I would bring you up to date on my experiences with this Control Panel Device or Cdev for short. Older members may recall my article in the April 1991 magazine recounting the series of catastrophes I suffered at the hands of the gremlins. One of the things I did (after the horse had bolted etc.) was buy a copy of Disk Express II to automatically optimise my hard disk for me.

For newer members who may not of heard of hard disk optimization or Disk Express II some form of introduction is in order. For those of you who know all about the subject then skip the following section unless you particularly like my prose.

Optimization - An Introduction

Disk optimization is one of those chores that either never gets done or if done at all then infrequently. When a hard disk (or any read/write device for that matter e.g. floppy disk) is used then as files are written, re-written and deleted the hard disk file order becomes rather disorganised.

By way of an analogy think of the hard disk inside your Mac as a car park. Cars come and go, some are larger than others and so may take up more than one parking space. If a car leaves (file deleted) and is replaced with a car and trailer (new larger file), then the disk operating system will decide to split the trailer from the car and park them in two different places. Of course the Mac knows where everything is parked and where the trailer is parked (next file segment). Everything works OK until you want to use the car and trailer. It's takes time for the car park attendant (The Mac) to find the car and the trailer and hitch the two together so that you can drive off into the sunset (run the programme).

As cars leave or change for larger or smaller vehicles than everything becomes very messy and time consuming. Of course there are some car users that only want their cars for a few days a month whilst there are those that use them every day. Murphy's Law will decide that the frequently used cars will end up parked at the back of the car park and hence will take the longest to find and drive away.

What I have just described is called disk fragmentation. Although you will not necessarily know what it is everyone who has used a hard disc for any length of time will have noticed a drop in operating speed of their Mac. This drop in speed is noticed during hard disk activity and in particular the boot up process on power on or restart. Disk defragmentation is the answer and will rearrange the card park (hard disk) so that all files and programmes are in one block and not split up. The free space is then left in one chunk to be used in the future.

Disk Express II

Disk Express II is one of the solutions on the market that will do the defragmentation task for you but in a rather more elegant way. For an earlier review you should read John Kishimoto's article in the December 1990 magazine. Since then Disk Express II has gone through two main revisions and several more revision numbers. The first was to upgrade it to work under System 7 and the second to enhance some of the features it boasted before. Before I discuss these new features an overview is in order to explain the basic features.

Disk Express II is a Cdev that will automatically load itself into memory every time the Mac is powered up or restarted. Once in memory it will automatically analyse the disk activity of every hard disk attached to the Mac. Once it has done this it will then commence to re-arrange the contents of the hard disk to defragment it and thus speed up its' operation. This is done during any spare time the Mac is left idle and the keyboard has not been touched or the hard disk accessed for a predetermined time. This time is not user selectable but is or example 15 minutes after power on in any one day. Any activity on the Mac will suspend the defragmentation of the hard disk until there is another lull in activity (lunch break etc.) when the operation will continue where it left off. With the older versions of Disk Express II the files on the hard disk were either anchored or moveable. The anchored files were typically the system files that were placed at the edge of the hard disk so as to be quickly accessible when powering up or restarting the Mac.

Disk Express II now goes beyond this with added features which remove some of the earlier operational problems encountered such as the inordinate length of time to defragment a nearly full hard disk. I shall now explain these features in more detail.

Customized Optimization

Disk Express II now allows the user to do more than specify the volumes (hard disks) to be optimised or just switch on/off the optimization procedure. The new features are described below.

Quick / Full Optimization

This option will allow the user to select the extent of optimization to be applied to the hard disks. If full optimization is selected then Disk Express II takes this as the nod for a rolled up selves approach to all the hard disk files

and gives them the full treatment. If however, quick optimization is selected then only the active files are ironed out. The 'dormant' files are left alone.

Optimise Only When Necessary

Disk Express II now will analyse your hard disk(s) and calculate an optimization rating between 0 and 100 %. From the options section of the control panel the user can stipulate the percentage optimization of the hard disk that can be tolerated before the programme swings into action. Therefore if you only use a few files every day and do not do too much to them the hard disk will not optimise every day if the optimization index threshold is set below 100%. So if you are willing to tolerate a level of fragmentation Disk Express will not operate every day but only when warranted. The user no longer has to switch of the Cdev and monitor the hard disk manually. The computer can do that for you. That's what I like, someone else doing the thinking for me.

Advanced Time Control

Before when using Disk Express II the programme would kick off and optimise any hard disks mounted once every 24 hours. So if burning the midnight oil the programme would start optimise at the midnight hour whether it had just completed the job or not. With this new version it is possible to stipulate the times during which optimization is allowed and more importantly when it is not allowed. So now you can have the optimization taking place during the lunch break or after you go home in the evening. The minimum time division that this feature allows is 30 minutes. So over 24 hours the time set aside for optimization can be defined around the work rather than have Disk Express II doing its' thing then it feels like it. No more waiting for a file transfer to complete until the control of your Mac is transferred back to you.

User Selectable Buffer Size

Before, the RAM space allocated to the optimization programme was hidden from the user. However, in this version for the first time, the user can select the amount of RAM to be given over to Disk Express II. The default (and minimum) is 4K. Although if it is made larger then the optimization is quicker. It all depends if you have the RAM space o give over to the programme. With the voracious appetite of System 7 for RAM then I feel many of us will leave well alone with 4 K. The options are 4, 8, 16, 32, 64 and 128 K bytes. For any change to take effect a restart is necessary as memory can only be allocated during start-up.

Portable Aware

This revision is now Portable (on which this article was written, produced and transmitted to TABBS) and the new PowerBook aware. There is a feature in the options setup that will allow the user to select auto-optimise only when the portable/PowerBook is plugged into the mains charger. This stops the hard disk operation during optimization draining the battery needlessly.

File Status Allocations

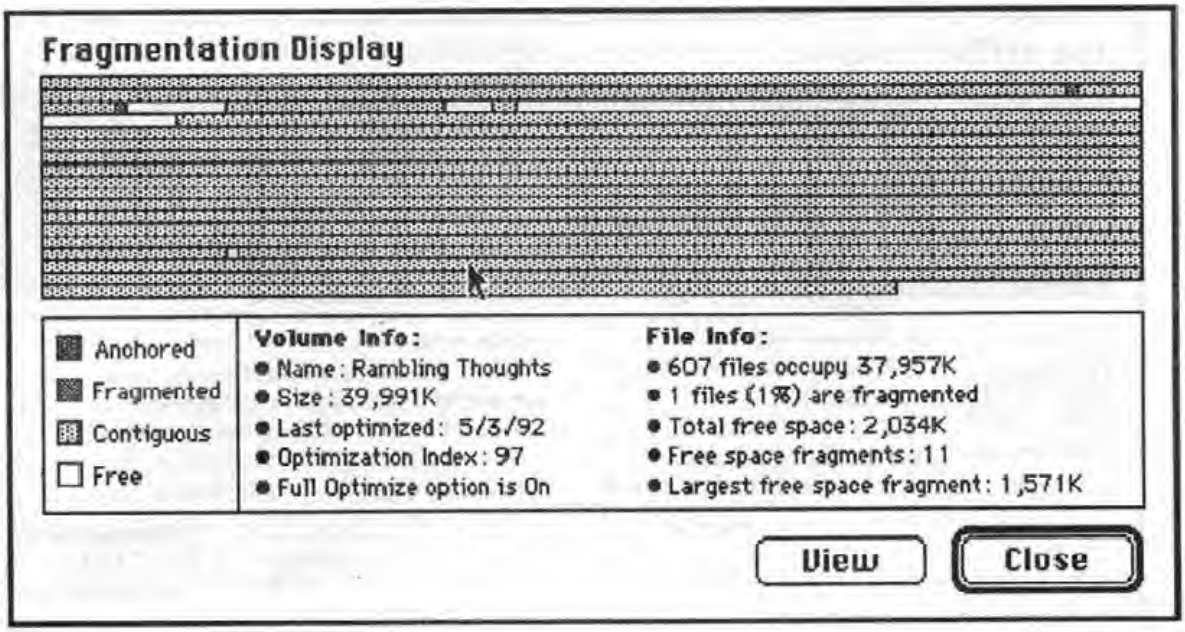
Before Disk Express II would allocate a label to a file as either anchored or active. The Anchored files were typically the ones that never changed due to their use such as the System file used during start-up. With the advent of this new version Disk Express has a large repertoire of name calling. These are :-

- Anchored Files — Files that are anchored at a particular point on the disk due to their operation i.e. partitions and some hidden files.
- Volume Directory — The 'index' where the Mac refers to when looking for the location of a file.
- Active Files — Those files such as wordprocesors that are being used frequently but do not change in size.
- Sporadic Files — Those files such as wordprocessor templates that are being occasionally used but do not change in sizet
- Dormant Files — Those old forgotten letters to the bank manager.

Disk Express uses these references to decide when and where to move files around the hard disk.

System 7 Features

Although it is compatible with System 6 this release is also fully compatible with System 7. This programme has in fact been compatible with System 7 since version 2.07 but lacking any of the new features which I will now discuss.



This new version of Disk Express supports the balloon help, virtual memory and alias files. Also for the larger RAM memory user Disk Express II is now 32 bit clean.

File Sharing Access Privileges

Disk Express II will maintain all AppleShare and File Access privileges so it can be used on a network server. Also it is compatible with TOPS® so that the network server can be always running at optimum speed. The advanced time control feature means that the optimization need not interfere with the operation of the network. The times when the server hard disk can be selected when the users are down the Pub or tucked up in bed (sleeping it off).

It is worth noting here that Disk Express II is network aware and will seek out other copies on other machines. Disk Express will not optimise hard disks on other machines across a network, only the machine it is running on. The licence agreement will only allow the running of a copy of on one machine and no more. If other Macs on the network are to use Disk Express II then additional copies must be bought. If duplicate copies of Disk Express are found then the network server copy will throw up a warning message and disable all other copies found on the network.

System 7 Alias Files

The new alias files introduced with System 7 are supported and will not be interfered with. The files references will be preserved and not lost. I must say I found these statements curious as in my use with version 2.07 of this programme I have not had any problems with the alias files I had created.

Virtual Memory

With the advent of System 7 virtual memory the Hard disk now operates as "RAM" to the Mac. Of course it is still a section of the hard disk and therefore subject to fragmentation just like all the rest of the volume. Disk Express II can recognise the existence of virtual memory and correctly handle it in it's optimization activity. There is however a small penalty in being able to do this and this in the setting up procedure. It is not just a case of switch on and leave the programme to do the rest. You have to start-up the Mac with the virtual memory switched off and then switch it on with the amount of memory you want to allocate to the virtual memory. Then optimise the hard disk containing the virtual memory allocation before restarting the Mac again. The advantage of going through this procedure is that Disk Express II will put the virtual memory section on the hard disk at the edge so that the minimum of time is required for access. The virtual memory will then be anchored at that location.

Balloon Help

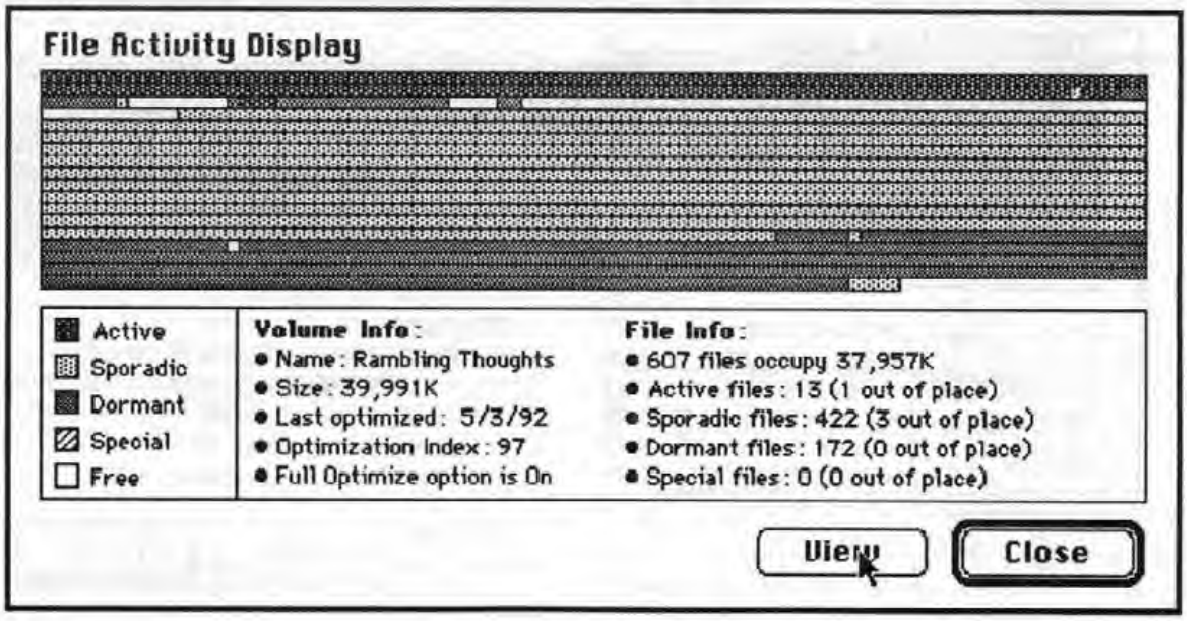
The balloon help feature which was introduced with System 7 is now supported. When the feature is switched on from the "?" menu in the menu-bar the programme pops up little messages in balloons to explain aspects of the programme. This is activated by moving the mouse pointer across the screen over the area of interest. Personally I feel that if you need this feature then the programme is too complicated or difficult to learn. I have found with most software that I only reach for the manual when I don't get the response to my actions that I expect. It is however a handy feature for the new user and will prevent wasted hours thumbing through manuals when you would rather be playing with your Mac.

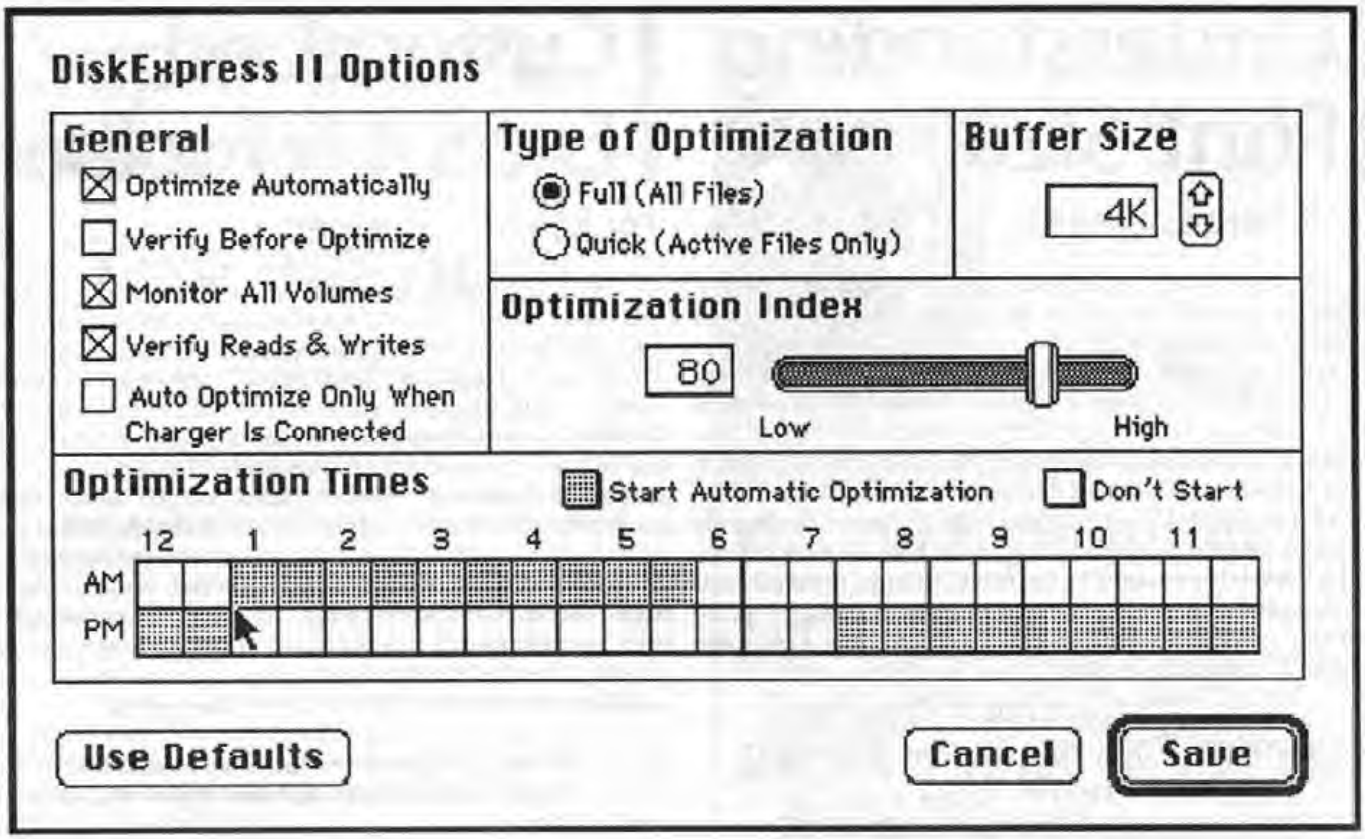
Personal Experiences

I have been using Disk Express II in its' various versions since 2.07 for over a year without any programme difficulties. I have chosen the preceding sentence carefully as I have had some problems which are not directly due to Disk Express II.

In the programmes activity it naturally has to read, move and write sections of data to differing parts of the hard disk. If during this transfer activity the computer hangs due to some other fault or error then this would stop Disk Express II from completing its' job on a file. Due to my hobby of trying out new pieces of free/share ware and meddling about in the system with ResEdit I frequently hang or bomb my computer.On occasion when this has happened and after a system reset the Apple menu icon flashes with a miniature Disk Express II icon to warn of a problem. Opening the control panel a descriptive warning is displayed detailing the file last being moved. The warning always suggests that the user check the file and copy from a back up if in doubt. In all but one case I have found that the file has been OK. This is a good record indeed and I have lapsed into a healthy regard for the programme. Not so healthy as to neglect the regular back up of my hard disk that is.

Finally, I must recount a recent event that occurred to me. I had downloaded the System 7 Tune-up kit from CompuServe to help with the memory management of my





2 M byte Portable. When I tried to apply the tune up to the hard disk by running the installer I encountered problems. These were initially a protest from Disk Express II that there was a fatal error in the directory and it could not continue. A ominous looking Grim Reaper icon accompanied this warning just to add some doom and gloom to the message. Are the people from Alsoft ghouls?

I reached for Norton Utilities to help me out again and although it initially found and repaired the directory error Disk Express II still protested and refused to optimise my hard disk. I ran Apple's Disk First Aid but it reported no problems and so I felt that something was wrong with the modified system and reloaded the System from the master disks. All was still not well on my hard disk as Disk Express still professed to find an error on my hard disk. That was until I got the this latest release of Disk Express II.

As with earlier versions a supplementary programme called DiskCheck was supplied. It is a hard disk verification programme with a directory checker and a repeating read/write test system to check hard disks for random errors. I had always thought this programme was of little use, until now that is.

Having little else to turn to I ran the programme to see what it could find. The full read/write test on 40 Mbytes of hard disk takes a long time (over an hour) but I did not have to wait that long. On testing the directory the programme reported that there were some "Orphaned Extents" that should be attended to by deleting. I had not until now heard of the term "Orphaned Extents" so was at a bit of a loss to know what to do. I remembered the last law of Engineering "If all else fails - read the manual". Sure enough here was the explanation. They are disk directory references to files that no longer exist. So my hard disk directory had a headache. Using DiskCheck I repaired this and all was once again well in my little world. So this utility which depends upon Disk Express II being present and loaded into memory to work had saved the day. It boldly went where Disk First Aid and Norton Utilities feared to tread.

For me Disk Express works well and reliably and I would recommend it to anyone who wishes to maintain an efficient hard disk and thus minimise mechanical wear on any hard disk drive. As far a utilities go it is a bit expensive but it is a cut above the rest. For those of you who have earlier versions I would recommend upgrading as the improvements are worth having.

Manual

With my upgrade came a new manual which explains in plain, non technical English the controls and operation of the programme. All necessary features are covered including installation and programme conflicts. Operation and options are explained as well as a section on trouble shooting. This section includes the DiskCheck utility discussed above.

In short a disk optimization programme for the very lazy, which must be why I like it.

Product : Disk Express II (V2.10)
Publisher : Alsoft Inc., Spring, Texas, USA
Available from : (Not Upgrades)
MacLine
123 Westmead Road
Sutton, Surrey
Tel. 081-642-2222
Price : £55.00 + VAT & P&P

Value for money :
Performance :
Documentation :

information

Understanding Font Size

by Maria L. Langer

Just about every Macintosh application gives you the ability to change the size of characters, but unless you're involved in desktop publishing or printing, you might not know what a point — the standard font measurement — is.

Simply stated, a point is approximately 1/72 of an inch. It's a printing measurement that goes way back to when type was set by hand. Like many printing terms and measurements it has been carried forward and is still in use today.

A font's point size is measured from the top of the highest ascender (like the horizontal line on an h or d) to the bottom of the lowest descender (like the hook on a g). Since all fonts are designed differently, different fonts with the same point size may not appear the same size. Look at these examples. They're all 14 points in size:

Times: Point size can be deceiving.

Helvetica: Point size can be deceiving.

Courier: Point size can be deceiving.

Palatino: Point size can be deceiving.

Use these guidelines when selecting one of the four basic Macintosh fonts for letters and other business documents:

Times: 12 points
Helvetica: 12 points
Courier: 12 points
Palatino: 12 points

This table might be useful if you need to convert inches to points:

inches	points
1/8	9
1/4	18
1/3	24
3/8	27
1/2	36
5/8	45
2/3	48
3/4	54
7/8	63
1	72

And don't be afraid to experiment!

About the Author

Maria L. Langer is a freelance writer and Macintosh consultant. Her latest book, The Mac Shareware Emporium (co-authored with Bernard J. David) includes detailed information on over 450 Macintosh shareware and freeware products, as well as two disks stuffed with shareware readers can try. You can contact Maria at any of the following electronic addresses: CompuServe: 70461,1663; America Online: MariaL1; AppleLink: MLANGER; FidoNet: 1:2605/157.1; and InterNet: maria11@aol.com. Or call her BBS, The Electronic Pen, at 201/767-6337. MUG NEWS SERVICE, 1992

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Customized Excel 4.0 Toolbar

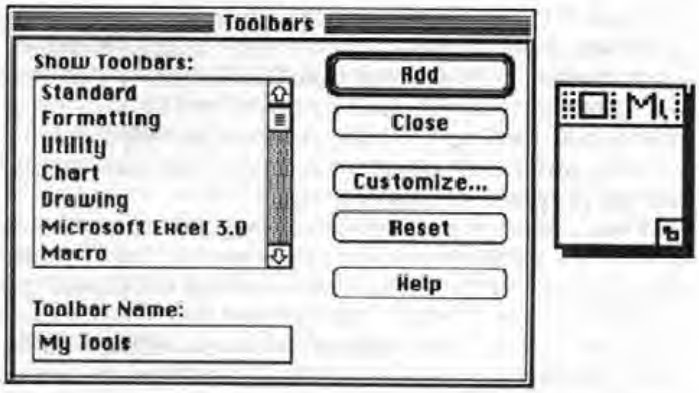
by Maria L. Langer

One of the great new features of Excel 4.0 is its eight toolbars. Each toolbar comes with a set of related tools. For example, the Formatting Toolbar comes with tools for Style, Font Name, Font Size, Bold, Italic, Underline, Strikeout, Justify Align, Currency Style, Percent Style, Comma Style, Increase Decimal, Decrease Decimal, Light Shading, and AutoFormat. To use a tool, simply select the cell(s) to work on and click the tool. Nothing could be quicker or easier.

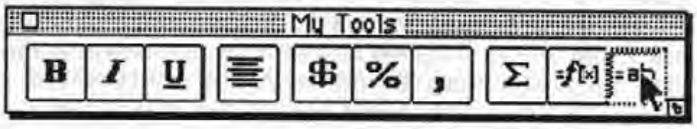
Unfortunately, the folks at Microsoft decided what tools to include on each toolbar. Tools you use might be excluded from the toolbar you want to use. Although you can display more than one toolbar at a time, if you do, you'll probably end up with tools you don't use. The solution is simple: create a custom toolbar with the tools you do use.

These instructions will walk you through it.

1. From the Options menu, choose Toolbars.
2. In the Toolbar Name edit box, type the name of the new toolbar.



3. Click the Add button. A tiny blank toolbar appears, along with the Customize dialog box.
4. In the Categories window, select the category of tools from which you want to add tools to your new toolbar. The tools for that category appear. If you need a description of a tool, click the tool and a short description appears.
5. Drag the tool from the Tools box to the desired position on your new toolbar. You can also move tools from other displayed toolbars to the new toolbar.
6. Repeat steps 4 and 5 until you have added all the tools you want. The toolbar will automatically be resized to accommodate all the tools. If you need to remove a tool, simply drag it off the toolbar. To reposition a tool, drag it to a new position on the toolbar.



7. When you're finished, click the Close button. You can then move your new toolbar into position above your worksheet.

Super Studio Session - The Manual

A Review By Mike Dawson

After my review in the June magazine of the System 7 revamped Super Studio Session I forgot all about it, I had other things on my mind. It was then with some surprise that an envelope arrived from Bogas Productions at the end of August.

Upon opening the package I found a letter from Marie A. D'Amoco of Bogas Productions. The letter explained that they had a revamped manual but that this was not included in the upgrade package as they thought that the postage was too heavy a burden. Hence the photocopy update supplied with the upgrade I had received. This had been criticised in my review as this was all that was offered, the revamped manual was not mentioned and hence I knew nothing of its existence.

Anyway, thanks to Marie and the enclosed manual kindly sent to me I can now put the record straight as I will now review the new documentation. The manual is indeed revamped, to the extent of changing its format and adding some extras to the contents. Gone is the ring-bound booklet and in comes the conventional stapled booklet of 48 pages in length. The manual will no longer lay flat on the desk but I suppose that is the penalty of cost cutting, but more of that later. The reduction in size is achieved not by reducing the contents but by the size of the font and the graphic illustrations.

The manual retains its format order to a large extent with some new additions. At the front of the manual is a 'what's new' section. The ensuing sections are given musical terms such as 'overture' and 'intermezzo' and generally follows the pull down menu items to be found in the programme. The manual is full of tips in using the programme as well as covering all the necessary points in the required detail.

The organisation and content of the manual are of good quality, but this should not be considered as a musical tutor. A knowledge of music notation is assumed, so this is not a programme for the novice to learn with. It is, however, a programme that the novice can use in conjunction with a good book. By being able to listen to the notes, the feedback is a great help in the learning process.

Any criticisms ? Well, there is one point—that is the lack of an index at the back of the manual. Then again, with the actual manual being only 37 pages in length and being so well laid out, finding a section or topic should be no real trouble.

The reduction in size and change in format is due to the high cost of shipping. In Marie's letter she states that the reason that the revamped manual was not offered was the high cost of shipping. However, Bogas Productions will send a new copy of the manual to registered users for US $5 upon request. The offer does not state if shipping is included, but I would feel that this would be extra although the postage to me was US$2.35 and took only 5 days from the West Coast of the USA.

So, again, Bogas Productions have proved that they care for their users on this side of the pond. Some of the British distributors should sit up and take note. There are some I have to chase to get upgrades as they don't even bother to tell me they exist!

Product : Super Studio Session - The Manual
Publisher : Bogas Productions
Available from :
Bogas Productions
751 Laurel Street
Suite 213
San Carlos
California 94070
USA
Tele USA 415-592-5129

information

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System 7 Saga

by Ray VanHook

They say we learn from our experiences. If you want some experiences so you can learn something, just switch to System 7 on the Macintosh.

The Error Message Blues

It's after one a.m. on a Saturday morning, and for the last fifteen minutes I have been getting messages on the computer telling me that my attempt to shut down failed because the printer wouldn't quit. The printer has been turned off for at least an hour! I gave up, and got my vengeance by pulling the plug from the wall receptacle. This always gives me the ultimate sense of power and restores my sanity. I decided long ago that the computer would not get the best of me because I had the final weapon...I could turn it off and walk away. Even though this helps, at times the computer does confuse, frustrate, and irritate me.

When I went downstairs, Dot said: "You were a happy man when you had System 6, but you've been going around mumbling to yourself ever since you switched to System 7". I thought that if mumbling is the worst thing I do then I will be a real saint. As you probably guessed by now, I'm having no small amount of trouble getting System 7 to do what I want without it feeding me a lot of silly error messages. I remember reading somewhere that System 7 is more stable than prior systems. I want to talk to the person who wrote that jewel of wisdom. I have a few system errors left over that anybody can have who wants them. Just let me know where to deliver them.

The Beginning

It all started about a month ago when I decided that the world of Mac was passing me by, and I was going to have to switch to System 7 if I expected to keep up. I made this decision in spite of the fact that I saw a man take his computer to the Macintosh dealer to have System 6 reinstalled. At the time, I thought, now there's a smart man. But I realize that there's no going back. System 7 will be the only game in town some day; so I bought it, took it home, and placed it neatly under the computer table. You didn't expect me to jump into things right away, did you? I just don't work that way. I have heard stories of people who lost lots of data when trying to install System 7, and of files that disappear mysteriously, never to be found again. It was obvious to me that my hard disk would have to be backed up before I started to change any system files.

Back Up, Back Up, Back Up

The backup turned out to be a problem. I have an 80 megabyte hard disk with 1,926 files on it (about 70 megabytes) and 134 items in my SystemFolder. Now, not all of this material is needed, or even wanted, but when am I going to find time to go through all those files to weed out the trash?! I threw away some graphics I knew I'd never want to use for anything, and this took a few hours. Well, the easiest thing to do is just back up everything and sort out want I want later. Fortunately, I have a backup program. I used this to examine the hard disk. It informed me that the backup would take over 2 hours and more than 80 floppy disks. Well, there's nothing else to do but get the disks ready. I started initializing floppies. I would initialize a few disks at a time. This went on for a few weeks before I seriously considered my alternatives. In fact, I have the floppies all initialized and stashed away in a safe place. I haven't even started to backup anything yet, and System 7 is still under the computer table.

The Removable Feast

What was I doing?! There's got to be a better way. I didn't even want to think about the onerous job of backing up all those megabytes and storing them on all those floppies. So I went down to AIS Computers, and Gene let me have an 88 megabyte removable hard disk. Oh, I paid several hundred dollars for it, but the price was competitive. With this removable I could back up everything, just as it is on my internal hard disk. Then, if something goes wrong when installing System 7, I can merely switch hard disks and go on with what I'm doing. With the first removable, I think I managed to get every System error from ID-01 to ID-36. Realizing that something was wrong, I took it back to Gene and went home with a new one. The first hard disk was faulty. This is one of the advantages of dealing with a local Macintosh dealer—there's no mailing the unit back and waiting for another. The second hard disk works fine, and it's fast. I merely moved the system and all of the files from my internal hard disk to the removable, and it took only about 15 minutes. I could talk about the removable hard disk all night. I think it's great.

There are some little tricks you have to learn. For example, I have the removable drive connected to the SCSI port on the computer and the LaserWriter II SC (which is a SCSI device, unlike most LaserWriters) is connected to the removable by a SCSI cable, with a terminator on the printer. This didn't work at first because the removable had three terminators installed internally. This still confuses me as to why they would do this knowing that in all likelihood the hard disk will be attached to the computer, with other SCSI devices running from the hard disk. As you know, the terminator should be on the last SCSI device in the chain. So, Hi Ho, Hi Ho, it's off to AIS we go...to have the terminators taken out of the removable hard disk.

Now everything seems to work fine, but I had to experiment to find out how to keep those aggravating error messages from coming up. Example: If I want to use the computer without turning the removable hard disk on, I may have to restart the computer several times before it stops returning error messages and gives me a desktop. So, what do I do? I merely turn on the removable first, insert a cartridge, and then turn on the Macintosh. When I do this, the computer boots up on the first try — sometimes. At other times I keep getting bus errors until after about five times of restarting the computer I will get the desktop. You didn't expect everything to work perfectly, did you? You should be like me. I have come to realize that nothing in my computer will ever work the way it once did. It used to start up on the first try and give me a smiling face. Now all I see are those black bombs. Anyway, I leave the removable turned on even though I may not plan on using it...everything seems to work better this way...but I'm not sure.

Give Me More RAM

Back to the System 7 saga. I'm now ready to install it.

First I tried to install it over the old system. But wait, when I tried to open Ready, Set, Go 5, I got the message that it could not be opened because there was not enough memory. This couldn't be, could it, because I have 4 megabytes of ram. I looked at "About this Macintosh," and it said the System Folder was taking up 2 megabytes. I had opened Teach Text, which took a few megs, and Ready, Set, Go, wanted about 1.7 megabytes. I thought, this is crazy! I can't even open one page layout program with System 7. I have 4 megabytes of ram, and they say you can run System 7 with only 2 megabytes. All I can say is that you may be able to run System 7 on 2 megabytes, but that's about all you can do. If you also want to run some inits and cdevs, forget it. You can't open more then one or two programs unless they are small programs. Of course one thing that eats up ram is that long list of inits and cdevs that we have learned to use and love. But, I don't want to give them up. There's no reason why I should have to give them up. We're going forward here...not backwards...aren't we?! Well, you know what's coming next. Hi Ho, Hi Ho, it's off to AIS we go...to get more ram.

The Damaged Hard Disk

Before I did this, however, I still had a system error problem to solve. The computer kept trying to be cantankerous. So I ran a disk which comes with System 7, called Compatibility Checker. It tells you whether you have any inits and cdevs in your old System Folder which might not be compatible with the new system. Then, when you tell it to do so, it takes them out of the System file and puts them in a folder. I did this, installed System 7, restarted the computer and got a System error. Can you imagine the frustration I felt? Weeks of planning, almost $1,000 spent on hardware and software, and I couldn't boot up the computer. The only silver lining on this cloud was the fact that I had everything, including the old system, backed up on the 88 megabyte removable hard disk. The System 7 package includes eleven disks, and one of them is called Disk Tools. This disk checks your hard disk for damage and tells you whether it can be repaired or not. As luck would have it, when I ran this disk I got the message that the internal 80 megabyte hard disk was damaged and could not be repaired. This doesn't mean exactly what it says. Whoever wrote this message just wanted to scare you out of 10 years' growth. It's trying to tell you that you have to reinitialize the hard disk and start from scratch. Again, I appreciated the backup to the removable hard disk. With confidence that I had this backup, I re-initialized the internal hard disk and re-installed System 7. After this, I started feeding back the files from the 88 megabyte removable, but stayed away from adding the inits and cdevs, or changing the System Folder. So far, so good.

Fonts Add Functionality to Your Mac

Everything was going well until I tried to open one of the files made under the old system. I got the message that the font New Century Schoolbook was not available in the new system. That's OK, all I had to do is move my fonts into the System Folder. So, I moved them all into the System Folder and I still got the message that New Century Schoolbook is not available! I started to look around to see if there was something I overlooked, although I had followed the steps shown on page 143 of the System 7 Reference Book, telling me to drag a font to the System Folder and everything would be taken care of. Fat chance! I saw a suitcase entitled "System," and when I clicked on it I found a list of fonts, but my New Century Schoolbook was not in the System. I tried to move the font into this file and got this message: "This file adds functionality to your Macintosh. To add this file's functionality to your Macintosh, place the file in the extensions folder and then restart the computer". (Somebody likes that word "functionality", don't they? I can't find the word in my dictionary, but if they are trying to tell me it makes the Mac work better, I'm all for it.) I tried adding the font to the extensions folder and what did I get — this message: "New Century Schoolbook Bold Italic cannot be put into the System file. Only fonts, sounds and keyboard layouts can be put in the System file". What do they think New Century Schoolbook is, if it isn't a font? I needed help, so I went to the Balloon Help feature of System 7 and got this message: "To install or remove fonts, sounds and keyboard layouts, drag them into or out of the System file".

Do you get the idea we're being jerked around? I think System 7 has too many messages. If it didn't have all of these different messages then they would have to write the software in such a way as to avoid any problems. I think when they wrote System 7, they wanted to make sure that all of the error messages would be used. It makes the person who wrote them feel a lot better knowing that their efforts will not go unrewarded, and everybody with a Mac will have a chance to see all these stimulating notes.

This whole mess with the fonts was getting me down, so I called our local font expert, Jim Alley. I knew I was doing something wrong but I couldn't find anything in the System 7 guides that would give me a clue. Jim reminded me that Type 1 fonts come in two parts, the screen font and the printer font. Most of the time the screen fonts come in suitcases, and I had not moved these fonts to the new system file. After doing this, everything worked fine. I got to wondering why the instructions from Apple couldn't have made this clear and then it dawned on me that the fonts that come with System 7 are True Type fonts and Apple is not going to make it easy for a novice like me to install Adobe Type 1 fonts. Also, I use a non-postscript printer with Adobe Type Manager™, and Apple would probably like to convert me to the True Type cause. I'm not ready to be converted.

The Saga Continues

Well, right now I'm working with no inits or cdevs except Adobe Type Manager. I'll get around to trying my old goodies out, one at a time, holding my breath, cursing the computer, and mumbling to myself a lot. All I can say is that installing System 7 can be a real experience. I'm still getting too many error messages and having a hard time booting up the computer. Oh, yes...after you install the new system, you must download the System 7 Tune Up from our BBS (this takes about 45 minutes) and put it in your System Folder. You didn't know that, did you?

I've talked to people who said they had no problem and everything went smoothly. Good for them. But, you take my warning and back up everything on your hard disk, or you may never see it again. I'm still looking for the font, "Seville Gray". It looks as though it may have been lost in the backup process. You are going to have to go through this System 7 stuff someday, and I hope you have more fun with it than I've had so far. Good luck. You will need it.

Ray VanHook

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MUG NEWS SERVICE, 1992

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Crash Barrier

Pointless or Protector ?

Mike Dawson Tries To Find Out

Introduction

Crash Barrier is a commercial utility that claims to help in catching that most dreaded of Mac curses, the system bomb. You know the sort of thing, a late night, a pressing deadline, frequent saves are forgotten and bang all your precious work is lost as an itinerant programme goes walkies all over your memory. The result is tears in the keyboard and a mean intent centred upon the monitor. Anyone who has used computers at all and has a working knowledge of Murphy's law will recognise the scenario, we have all been there ..... or will be at some time.

It is this dread of the inevitable that the guys at Cassidy and Greene have come up with a possible protector. So what is this utility and how does it operate ?

Crash Barrier — The Extension

Crash Barrier is an initialisation programme that is installed in your Mac during start-up. Under System 7 it is an Extension and under system 6 it is a control panel device (Cdev) alone.

Installation is not a matter of dropping the utility into the System folder and re-booting. Under either system 6 or system 7 the main criteria is to ensure that Crash Barrier is the first utility to load during the start up procedure. The sooner Crash Barrier is loaded the sooner it can start to work for you. How to do this is explained in the manual and is easily accomplished. Under system 7 the installation is a little more involved as the utility has to live in the extensions folder and not the control panel folder where System 7 will automatically place it. This is because the Mac will load all extensions first and then go on to the control panels. So even though Crash Barrier is a Control panel it must reside in the Extensions folder. Renaming it will ensure it is the first to load on start up or restart. Then an alias has to be made to be placed in the control panel folder so that the user can call it from the Apple Menu. All that needs to be done is to open the control panel, set the user level and restart to load the utility and try to feel more secure and protected in an insecure world.

Crash Barrier does not claim to prevent or cure all known system crashes but to make an attempt at doing so. As is quite rightly pointed out in the manual if your Mac has crashed then it has most lightly been a fatal error that cannot be recovered from under any circumstances. Where crash barrier comes in is that it tries to recover from a crash to bring your Mac back to life. This may only be at limping speed but you can then (hopefully) do a quick save to preserve otherwise lost work. The manual and intercept dialogue box then both urge you to do a system restart to ensure all the Mac parameters are reset and healthy again. The user is well advised by the manual to do what every experienced Mac user should have ingrained upon their subconscious - backup regularly.

After some months of using this utility on my Mac II I have had Crash Barrier intercept numerous crashes. Indeed I can only recall one or two crashes that it did not manage to catch. However, catching is one thing, recovery is quite another task. Of all the bombs I get, and I get a lot due to my love of trying out freeware and shareware utilities, the success rate is not really impressive. This should not be taken as a severe criticism as after all we are talking about an otherwise fatal error that previously only a system reset would cure. As the manual points out it only has to work once on an important block of work to be worth its' sale price. In this respect I have had my monies worth already as it has once saved me from losing some work.

Crash Barrier — The Crash Interceptor

So what happens when a crash occurs during the running of a programme ? This somewhat depends upon the user setting of Crash Barrier as there are two user levels. These are beginner and expert. As the level increases the amount of explanation and options increases on the intercept dialogue box. This dialogue box is thrown up on the screen when a system crash or bomb is intercepted. Advice is given in the dialogue box header and a description of the System bomb that has been encountered. No more error id 2 messages although there have been a couple of bombs which Crash Barrier did not know the error message. The dialogue box offers several options to try and get you out of the mire. These are :

Fix it (Cmd-F) where Crash Barrier attempts to fix the problem for you automatically.

Continue (Cmd-C) trys to re-enter the programme in the hope that it will enable you to continue. This is not always available due to the type of error.

Resume (Cmd-E) This will only work if the programme being run has provided the facility to resume. Therefore this option is not always available.

Reenter (Cmd-R) This atampts to get the itenerant programme back to limping speed so a save can be attempted.

Un hang (Cmd-U) Unfreezes a Hung Mac.

Restart (Cmd-S) makes the Mac go into a restart so all your work will be lost and finally,

Quit (Cmd-Q) attempts to quit the running programme and return to the Finder when again all your work will be lost.

So what happens when your Mac hangs and the intercept dialogue box does not appear ? A hang is when the Mac freezes and nothing will respond including the mouse. Crash Barrier will not intercept this type of error every time so the programmers have given a keyboard combination of shift-option-command-period to invoke the Crash Barrier dialogue. This can be done at any time and not just during a system hang. A utility is automatically present at this time to unfreeze the mouse pointer if it has become stuck. This keyboard combination can be user defined to allow the avoidance of clashes with other programme key sequences. This change is accessed via the control panel.

Crash Barrier — The Control Panel

This is the user interface to the knobs and dials of the programme. From here all the variables can be set and changed. However, for all the settings with the exception of auto save, a restart will have to be invoked before the new settings take effect. The control panel has several screens of which I shall describe now.

System Memory Setting

This control panel page allows the alteration of the amount of Mac RAM (Random Access Memory) that is allocated to the central processor for its' own use. This is called "System Memory". It is NOT the same as the user RAM that our programmes run in. It appears that some of the system bombs are caused by the microprocessor running out of space

for its' own use. The recommendation by Crash Barrier is that at least 20% of the Mac RAM is allocated to the System. A slide bar is provided to adjust this but the setting is arbitrary as there is no way of knowing how much memory has been allocated until a restart is done and the control panel is re-opened again.

Crash Barrier — The Auto Save Utility

This is similar to a couple of shareware Cdev's I've seen around over the past couple of years. Where it scores over its' rivals is that it can be programmed to do an auto save for you after a user defined time interval, number of keystrokes or mouseclicks. It should therefore work for you just as easily when writing that top ten best seller or when designing the new dog kennel. Other than that all that can be said for this section is that it works without problems or fuss with every programme I've worked with.

Crash Barrier — The On-Line Help

On line help is provided to assist in the setting of the control panel interfaces for the various sections of the Crash Barrier utility. These are only for the setting up and are not made available when a system error occurs. However, as explained above when an error does occur the dialogue boxes thrown up by Crash Barrier are sufficiently detailed for the user to be able to make a reasoned decision. The on line help screens are well written with some of the technical jargon explained and as such are really excerpts from the manual

Crash Barrier — The Manual

The manual is a cheap looking booklet written in rather small text. The style is joky and informative and not aimed at the techies although there are some sections that do get down to that level. This does not detract from the usability of the product as all the necessary sections are well explained including, to its' credit, the inherent shortcomings of the programme.

Conclusion

Crash Barrier has been lightly reviewed in the Macintosh press as having an indeterminate value. The valid reasoning is if there are no crashes how do you know if there would have been without crash barrier being present. It's a chicken and egg situation.

I can only state that it has been a saviour for me as the system memory resetting control panel utility has saved me a lot of grief, work and wasted time. This one section has been the single most beneficial part of the whole suite of Crash Barrier. After resetting the RAM memory to over 20% the number of system crashes has dropped noticeably. In fact I now work at many sessions without a single bomb happening whereas before I could endure several of the dammed things. As such it has been worth it alone.

If you are like me and love to hack and play around with freeware and shareware and suffer from frequent system bombs then this is the utility for you. If you only work with a couple of commercial applications and never have any trouble then this neat set of utilities could be a waste of time and money or then again there is Murphy's Law.....

Product : Crash Barrier
Publisher : Casady & Greene Inc.
Available from :
MacLine
123 Westmead Road
Sutton
Surrey SM1 4JH
Tele 081-642-2222
Price : £49.00 + PP & VAT

Value for money :
Performance :
Documentation :

information

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The Apple Bulletin Board System

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<;>Time <G>oodbye

<1> Apple ][ room
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<C>onference Area
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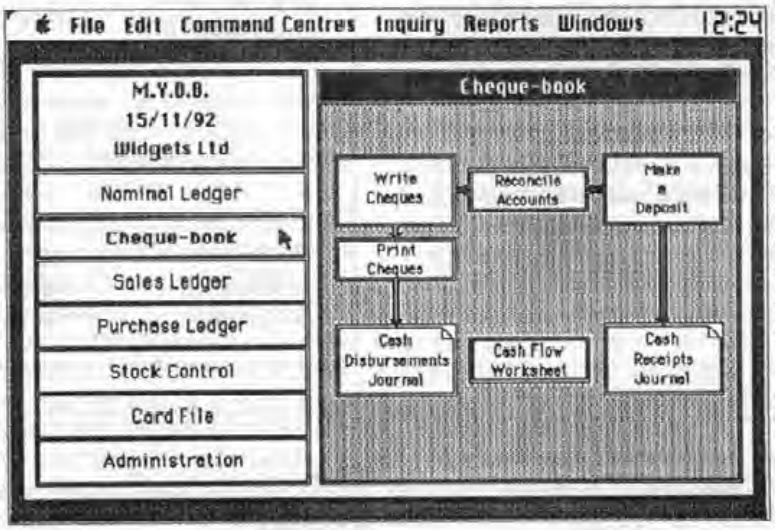
M.Y.O.B.

Irene Flaxman checks out a new integrated accounting system for the Macintosh

I immediately recognised the initials 'M.Y.O.B.', bringing back happy memories of my childhood. The initials stand for 'Mind Your Own Business' — it was our school motto, when I attended primary school! When put into the context of an accounting package, the name takes on a new meaning — Mind Your Own Business means keeping control.

Accounting packages are notoriously difficult to use — well, aren't they? You need an accountant to set you straight — well, don't you? Meet a new integrated package from Soft Numbers, and you may change your mind. Soft Numbers have been around for quite a while — they first introduced Apple Accounting in 1986, and this suite of programmes has been developed over the years but they are still sold as separate modules.

The new offering (M.Y.O.B.) is an integrated package comprising everything you need to control your business financially, and containing a few extra facilities — like the 'to do' list and the time log. The interface is pure Macintosh. It is easy to find your way around the system. Everything is accessible from a series of 'control centres'.



Two manuals are provided to help you use the system effectively. The first is a tutorial, which takes you through the basic transactions needed to record the accounting entries necessary to control your business. A sample company has been set up in order to make the tutorial simple to follow. This is used to explain many basic accounting concepts, to make it easier to understand the terminology and the reasons behind the accounting entries. The second is a complete user guide, which explains all the options available in the programme.

The user guide is set out in a very logical format, with separate chapters for each of the 'command centres' — nominal ledger, cheque book, sales ledger, purchase ledger, stock control, card file, administration. Choosing one of the command centres gives access to the facilities available for control of that particular area (e.g. choosing 'cheque book' leads to a further command centre which gives access to related facilities: write cheques, print cheques, cash disbursements journal, make a deposit, cash receipts journal, reconcile accounts, cash flow worksheet).

At the end of every chapter, there is a troubleshooting guide advising what to do if things go wrong!

One particular feature, which I feel is really helpful, is the option to reverse a transaction. No accounting system should allow the user to delete transactions, once they have been posted. However, we all make mistakes from time to time — and the way to correct our mistakes is to create transactions which are the reverse of the originals (i.e. we cannot remove the original entries, but creating reversing entries puts us 'back to square one'). The problem is that many users simply do not understand accounting concepts and therefore find it difficult to create the reversing transactions. M.Y.O.B. takes the hard work out of this — if the user selects 'reverse the transaction', the system will automatically generate all the associated accounting entries.

As one would expect, a full audit trail is provided, so that you will keep everyone happy — your accountant, the Inland Revenue, H.M. Customs & Excise — all should be able to understand the reports, to validate the accounts.

Account codes can be created at four levels, to enable you to tailor reports for better control. Four levels mean that you can have up to three levels of subtotals, to suit your needs — although many businesses will probably only use the detailed level and one level of subtotals.

The system allows for three sets of figures to be maintained — budget, last year's actual and this year's actual. So, as the year progresses, you can compare the business's performance with the budget or with the previous year (e.g. comparative trading accounts or balance sheets). This is again aimed at helping you to keep better control.

There are many small details which ease the book-keeping task — e.g. the 'card file' is always available, to check on customers' or suppliers' names and addresses or account codes. In many circumstances, a small arrow is included on the input screen — and you quickly learn that this is a way to request an on-screen report, to help you keep track of your progress to date.

The system also allows you to 'recap' a transaction before posting, so you can be sure that you are using the correct procedures.

Any transactions which are likely to be repeated, e.g. a regular order from a customer, can be identified as 'recurring' and the details will always be available for posting — therefore you only need to complete the full details once, and post them many times. The system can take account of them, too, when preparing reports such as cash flow statements, etc. — which is another useful feature.

The system recognises the difference between a service invoice and an item invoice. It also recognises the difference between items bought for stock and items bought for in-house use. These differences are taken into account in the input screens and also in the accounting records which are affected when sales and purchase invoices are posted.

The card files (i.e. the databases of customers, suppliers, etc.) can be used to create personalised letters. Therefore, there is no need to invest in a separate database package.

Sales and purchases can be placed in pending files, for later delivery. On-account payments can be handled with ease. I have to admit that I could not think of a situation which had not been anticipated and built into the software!

Various statistical analyses are available. Costs can be analysed to individual jobs, to allow for more accurate billing. Sales can be analysed by employee, to allow calculation of commission or bonuses.

Stock control is available, allowing you to record stock

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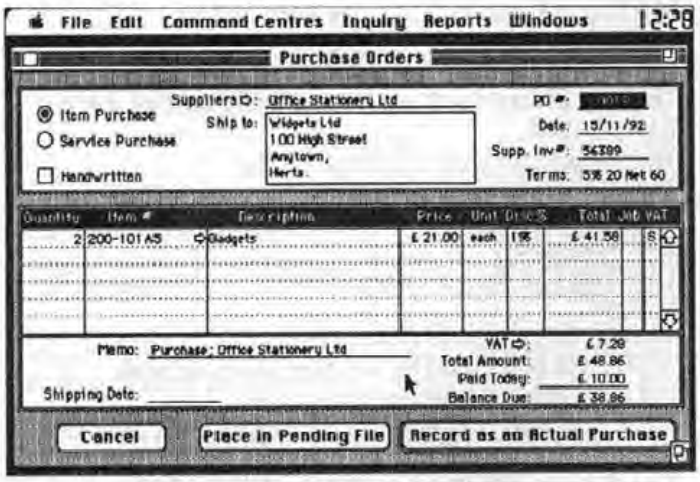


levels for comparison with physical stock checks and for use with re-order levels as an early warning when stocks are getting low. This system takes account of pending sales and purchases when creating an entry in your 'to do' list, reminding you to order stock. If you have a preferred supplier, the system can even raise the purchase order automatically.

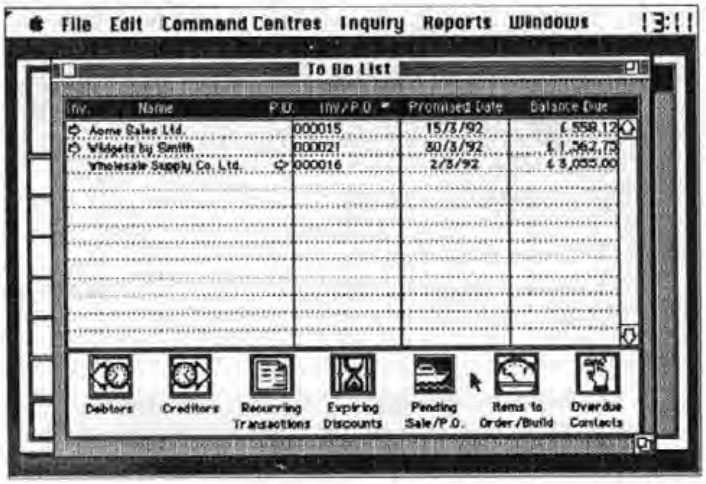
Product prices can be changed globally or individually, with prices increased by set amounts or percentages, or related to margins based on costs prices. When adjusting prices, you can control roundings, make prices a multiple of (e.g.) 25pence, or make them end in (e.g.) 99pence.

The 'to do list' screen is shown here, to illustrate the facilities available in this one area. You can create a business calendar, to work in conjunction with this, so that reminders are brought forward to allow for dates when the business is closed for holidays, etc.

There are standard charts of accounts, which will suit most businesses. As with all accounting packages, it is as well to ensure that your accountant can work with the information, and it is stressed you should discuss how to organise information before you start to set up your computer system.

All-in-all, I found the system easy to set up, and easy to use. The explanations of seemingly complex accounting issues makes it easier to understand what is being recorded — and such explanations appear right through the manuals, using everyday terms which we can all understand. Whenever critical decisions need to be made, the need is explained, and discussion with your accountant is advised.

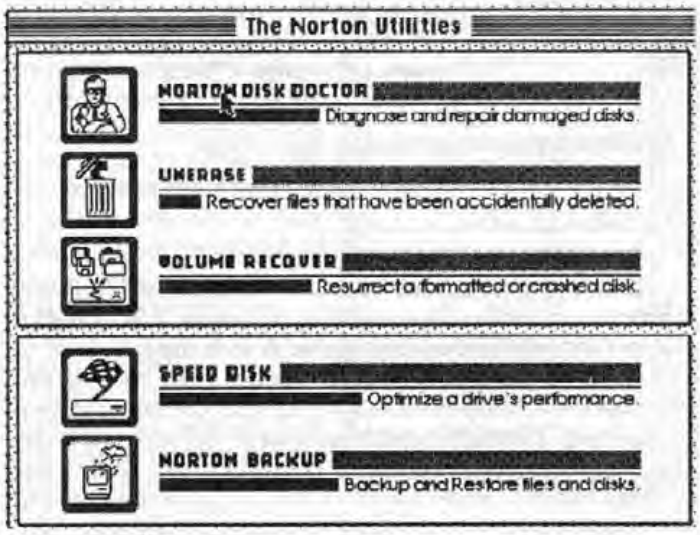
M.Y.O.B. is only available as a single-user system, currently — but Soft Numbers are working on a multi-user version. The recommended retail price is £395 + VAT, and is available from Apple dealers.



Norton Utilities 2.0

By Mike Dawson

Almost a year after the advent of System 7 and the relegation of Norton Utilities version 1.0 to the nostalgic section of my disk box, version 2 has been released. Version 1.0 was not compatible with system 7 and despite sending off my registration form I heard nothing of any updates. Since my last review of Norton Utilities back in the February 1991 magazine, Norton computing was taken over by Symantic, suppliers of programming languages. This may be the explanation for my lack of updates despite my telephoning and requesting them. So what did I get for my £49 + VAT package and almost a year of feeling vulnerable? The new Norton Utilities retains a lot of it's old interface and is therefore familiar ground for the experienced user. There is however, a host of new features.



The suite of utilities comes on six floppy disks. Included in these are two emergency disks. One is in a 800K disk format whilst the other is a 1.4 M byte format disk for the newer machines. Gone is the dramatic red coloured emergency disk of the earlier Norton Computing offering as these disks are the same cream colour as all the rest. These emergency disks are for the dreadful day when your Mac won't boot from its' internal hard drive. They contain a basic system and the Norton Disk Doctor so you can boot from these discs and attempt a repair of your uncooperative disk. They are effective as I can attest to from experience. The one thing to bear in mind on the 800K format is that it contains not System 7 as you might expect but System 6.1.7. The reason for this is System 7's disk storage requirements are so great that it cannot live on a 800K disk.

There are new sections to the main programme as well as other utilities. I shall discuss all the relevant sections in turn below.

The Main Programme — Norton Disk Doctor

Norton Disk Doctor (hereafter called NDD for short) when fired up presents a menu selection box of which the top one is NDD. This when selected presents the user with a hard disk selection dialogue box which also offers a SCSI scan option. This enables the detection of itinerant hard disks that refuse to appear on the desk top. Once the target disk is selected another information screen appears and all the user is left to do is say go. NDD then races away and checks the hard disk for what seems everything under the sun. Lost files are looked for, directory checked and files scanned amongst some of the things it gets up to. If a problem is encountered then a dialogue box pops up to explain the fault and suggest a remedy. This remedy is sometimes optional but on other occasions the suggestion is more forceful with remarks like "You should choose to fix this". Once the option to fix the problem has been selected the comforting "Fixed" message comes back after a few moments. NDD then continues on it's way searching out faults and errors. In all it appears to be very through, comprehensive and easy to use so novices should not be put off at all from using it

Once a scan and repair job has been completed the user is given the option of a full report. Below is a copy of a report I obtained from my Portable. The name "Rambling Thoughts" refers to the Portables' hard disk. It is named so because the Portable is networked with a Mac II when I'm back at base. The Mac II's hard disk is called "Deep Thought" from the book, Hitch Hikers Guide to the Galaxy, so hence Rambling Thoughts.

Norton Disk Doctor Report
Norton Disk Doctor
Report for Rambling Thoughts
Thursday, August 13, 1992 7:00 am

System Information:
Machine Name: Mike At Large (Author's Note - My Mac II is called "Mike At Home")
Macintosh Portable, 2 Megabytes of RAM

System Area Status:
The Boot Blocks check out OK and indicate that this is a bootable disk.
The Volume Information Block is OK.
The Directory Structure is OK

Disk Statistics:
This is an HFS disk. (Author's Note HFS = Hierachial File System)
40,950,784 bytes total disk space.
35,001,344 bytes used by 508 files in 102 folders.
641,024 bytes used by the system area.
5,308,416 bytes available on the disk (5,184K free).Disk Technical Information:
This disk was initialized on Friday, July 31, 1992 9:55 am
This disk was last modified on Thursday, August 13, 1992 6:58 am
There are 39,991 allocation blocks on this volume.
The Allocation Size is 2 blocks (1,024 bytes).
The volume bit map starts at sector #3.
The first sector represented in the volume bit map is #13.

File Status:
508 files were scanned.
361 had resource forks.

The following files could not be read and are probably damaged.
You should remove these files from your disk.
Rambling Thoughts:Desktop Folder:Magic Menu
System Folder Details:

The active System files on this disk are:
Rambling Thoughts:System Folder:System (version B1-7.0)
Rambling Thoughts:System Folder:Finder (version B1-7.0)

The active Control Panels on this disk are:
ApplicationMenu (Desk Accessories)
File Sharing Monitor (version 7.0)
General Controls (version B1-7.0)
InUse cdev 2.0 (version 2.0)
Keyboard (version 7.0)
Labels (version 7.0)
Map (version 7.0)
Memory (version 7.0)
MenuExtend (version 1.0)
Mouse (version 7.0)
PopChar (version 1.9.1)
Portable (version B1-7.0)
Sharing Setup (version 7.0)
Sound (version 7.0)
Startup Disk (version 7.0)
SuperClock! v 3.9 (version 3.9)
Users & Groups (version 7.0)
Views (version 7.0)
Extensions Manager 1.6 (version 1.6)

The active System Extensions on this disk are:
Disinfectant INIT (version 2.9)
MasterJuggler (version 1.57c)
Extensions Manager 1.6 (version 1.6)

Technical Summary of Repairs:
612:38, Some files on this disk are possibly damaged.

Summary:
The drive appears to be in working order. Frequent backups will insure the integrity of your data.

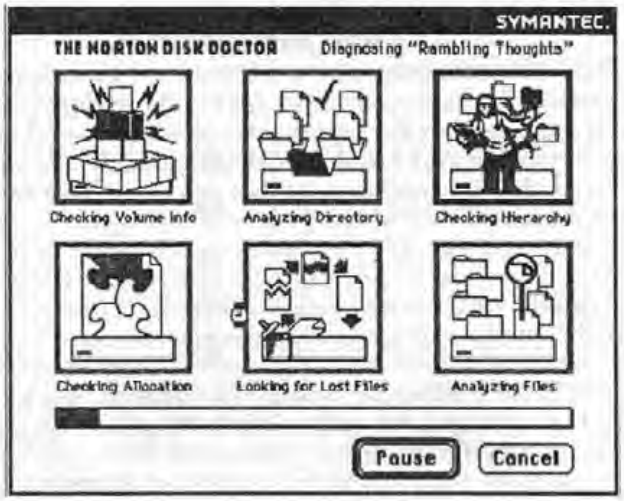
An Aside

Incase you were wondering how I get system 7 working in two Megabytes of RAM I reduce the RAM cache to a minimum (16K) and delete or switch out all unnecessary DA's, Inits and Cdev's. Fonts and Sounds are handled by Master Juggler (or Suitcase will do) so they do not take up System memory space. Then I use Extensions Manager to switch in and out these memory grabbers as and when needed. Hence it is possible to run the full copy of Nisus on a 2 Meg System 7. When Nisus Compact came out I wondered why such a product was necessary as I was already using the full version on the 2 Meg Portable without any problems.

What Norton Cannot Do

So far, so wonderful, but can Norton detect and repair everything in the known universe ? Well naturally being a software tool it can only attempt to repair software problems. If your hard disk has a mechanical malaise then all that Norton will do is tell you have a mechanical problem or not if everything freezes up.

So what of software problems ? No it can't detect all known computer ills as I have found out on one occasion. I recently encountered a failed programme which every time I ran it locked up on my portable. Testing with NDD gave the hard disk a clean bill of health as did Disinfectant. So I turned to DiskCheck, a utility that comes with the hard disk defragmentation programme Disk Express II. Running this quickly told me that the offending programme had an actual size of x bytes whereas the disk directory had very different ideas (like K Bytes different). DiskCheck recommended a complete hard disk rebuild which I duly did and managed to cure the problem without too much trouble. The moral of this story if you have not guessed by now is BACK UP REGULARLY.



The one thing missing from this suite of utilities is virus detection and repair programmes. I do not feel that this is an important omission as viruses can appear all the time and not just before major product releases. The excellent (and free) Disinfectant does an admirable job in this area although I have never encountered a virus to date (touch plastic). The NDD manual claims that the good doctor is able to detect some of the common viruses and advise of their presence. It cannot do a repair though and just refers you to another Symantic programme to do that job.

Now onto the remaining programmes of Norton Utilities.

Undelete

Undelete is the file recover utility that will resurrect accidentally thrown away files. There is of course a caveat here as if a subsequent save to the hard disk over writes the deleted file then all is lost. The utility will allow you to scan the hard disk for the file by name, size or age (date) so that the search can be localised and hence quicker. It works well and should be able to help in most situations, well worth having.

Format Recover

This utility helps when the user goes one step greater than simply deleting a file but decides to re-format the whole drive. I have had to do this myself a couple of times to repair a drive that neither Norton or Apples own Disk Doctor would touch. If this is done then all the disk format process (usually) does is to simply erase all the file markers on the disk and not to erase the files at all. The disk directory in this case is useless but if the Norton FileSaver has been used this is of no importance as Norton Format recover will use this file to quickly resurrect the lost files. If FileSaver has not been used then all is still not lost. Norton will do a complete scan of the drive and list a complete inventory of the files found. Against these will be a confidence level of the ability of the file to be resurrected. These range from Excellent to Poor, even if the level is poor it can be resurrected as some if not all the data can be perhaps recovered. If it is a programme that has a poor rating then a part recovered application is about as much use as a hang glider to Cyril Smith., time to sob into your beer.

When recovering files it is important to recover to a new

hard disk as recovering to the same hard disk will present the programme with the quandary of over writing files that it may have to otherwise recover later !. So if you are contemplating recovering a re-formatted hard disk be well advised to having several boxes of floppies handy or even better, a huge hard disk.

Additional Utilities

Norton Backup

This rather neat programme will do complete backups or incremental backups as required. One odd thing about it is that it assumes that the backup will be made onto floppy discs. Both 800k and 1.4 Meg discs are catered for but not anything else. It would appear that Symantic have never heard of removable cartridges (Magnetic and Optical) or they don't think they are suitable. However, how many floppies would I need to do a complete backup of my Mac II's array of hard disks ? I would make a guess at 315 High Density Disks !!. For the smaller system user this type of restriction may not be of such an important point. Especially as there are options that will exclude the System files and applications from being backed up and thus save valuable space and time. Backups can be conducted across networks so a network administrator can do backups remotely. Backups are manually instigated and are not automated such that at a particular time and day the backup will take place automatically. This manual system will take some personal discipline but if you have already mastered the first law of Mac survival (Backup Regularly) then this utility will come as a helper and not a hindrance. During the backup procedure the programme will conduct a compression on the data to reduce the number of floppies needed. In all a well written an worthwhile utility except for the floppy restriction.

I do my backups with a programme from MicroSeeds called Redux which will use any storage media selected to back up to.

SpeedDisk

This is the familiar hard disk defragmentation programme without any new bells or whistles. All that can be said about it is it works and puts all the right things in the right places. One of the peculiar things about this programme is that it cannot be run from the start-up volume (or boot disk). It would seem that SpeedDisk cannot defragment itself unlike DiskExpress II. Also unlike DiskExpress II it has to be manually run and has no built in "intelligence" so that files are not arranged as to the way you work. That is to say that DiskExpress II will collect all dormant files together, sporadic files together and all Active files together. This means that the hard disk will not fragment as quickly as if it was optimised by Norton's SpeedDisk. The one thing I do like about SpeedDisk is the display. The hard disk tracks are displayed as horizontal lines and a pencil whizzes backwards and forwards to erase and write files as the defragmentation takes place, very neat.

Directory Assistance

This is an Init, that is to say an initialisation file that loads itself into memory at start-up. It adds numerous features to the open and save/close file dialogue box which is normally seen when loading and saving files and documents. It operates in a similar way to 'boomerang' . This is to say that it places new pull down menu at the top of the dialogue box. The new features then available include the ability to choose a mounted hard disk, recently used folders, or recently used files from pull down menus. These can be configured so that your favourite application can be tailored to the way you work by adding a standard list of files that are regularly used. These custom lists can be created for each and any application. There is also the global set which is activated with any programme.

Other features that the very helpful utility gives you is the ability to search for files, look at the Get Info contents and change the order of the folders and files listed in the open file dialogue box. There is even a facility to edit the application/document icons under system 7 complete with the range of painting tools you would expect to see.

FastFind

This is a desk accessory that performs a fast search of your hard disks for file with matching names. Part names can be entered for hits with every file that contains that string. It operates better in some ways than the search facility that comes with System 7. All mounted volumes (hard disks to you and me) are shown for selection and all matches are listed in a scrolling field. Thus instead of searching all discs in sequence and showing one file at a time as the System 7 offering does it operates to my mind in an altogether different and better manner. All the files listed can be viewed without opening them with the original application so that a wordprocessor file can be examined before opening. This can save valuable time when going through a series of files looking for the right one. The opening of the document can also be done from within the desk accessory as can the file be moved up to the desktop. So this DA is all you should ever need. The only point it falls down on is the options for restricting the searches and applying Boolean logic criterion to them. Apart from that it is an excellent DA and will even extend its' searches over networks just as the Apple System 7 one does.

FileSaver

FileSaver is a double edged utility. On the one edge it creates an independent disk directory on every disk you nominate. This is to help Norton Disk Doctor resurrect a damaged or re-formatted hard disk where the regular disk directory is damaged or erased. The other edge is it saves all the 'get info' box details so that they can be reloaded by Norton after a desk top rebuild. As ever there is are penalties for doing this and they are space on your hard disk and time it takes when it does it's own save. The save frequency and activity can be set via the control panel. This alternative directory can be built only at shutdown or at pre-defined intervals. I would not recommend regular saves if you are a user of communications programmes. I had this set and when connected to CompuServe the FileSaver started to make an update of every hard disk connected (3). The result was CompuServe thinking I had given up on the download promptly disconnected me ! I now have the update set for shutdown and restarts only.

Norton File Encryption

This is a programme for the secretive and paranoid, and those with a good memory. When a file is encrypted a word is used as a key to regain access. If this key word is lost or forgotten then you can also forget the file because you don't have enough time in your life to try all the combinations ! The only hope is to enable a back door option so that there is a chance to get at the data if the key word is lost or forgotten. This can be either invoked by the user when starting to encrypt a file or by the network supervisor to ensure that non of the networks users can encrypt files and lock away for ever the valuable data.

Norton File Delete

This is either a potential security system or a bad thing depending upon your point of view. What the programme will do is over write all files on a hard disk that have been deleted. This will then destroy the data completely and even

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the venerable Norton Disk Doctor will not be able to help. The data will simply be gone forever. So who would want such a facility? Someone for example who is selling his old hard disk and who wants to prevent all his love letters to Ferggie from ending up in the tabloid press for one. Office snoops who want to get hold of your long awaited strategic report to the boss for another. This is a utility for the paranoid and secretive, use with care and thought, it's irreversible.

Floppier

This is a floppy disc copy utility which will make the task of copying lots of discs easy. It will build a floppy image file on a hard disk and then copy, copy, copy onto floppy discs. No need to format the floppy disc first as this is done during the floppy copy exercise. A useful utility if you do a lot of copying and distribution of disks.

The Manuals

The manual is unusually a paperback book rather than the spiral bound folder we are used to from other products. This means that it will not lay flat when placed on a desk. The contents are packed with clear instructions and the real technical stuff is consigned to the rear of the book. All the instructions are clear and illustrated were appropriate. Altogether it is a well laid out and written manual. All the different sections of Norton Utilities are covered in detail so that the user will either get the best use out of them or be able to use the main disk repair utility with confidence. All sorts of problems are described together with their probable causes and cures. Unusually the major sections of the programme are dealt with first and then a reference section later in the manual takes the user into the full features of the programme. This will help the impatient to get into the programmes and be able to use hem and then later find out their real power.

Conclusion

Norton Utilities is a very good collection of useful programmes. Even if you are one of these blessed people who's bread always lands jam side up when you drop it and who never gets problems with hard disks there is still something for you. I have learnt to rely on Norton Utilities and scan my hard disks about once a week. This way I catch problems early and not discover them later when a system bomb destroys work. No, Norton cannot cure all know ills but it very nearly does. I would urge every Mac user to get a copy, it's indispensable.

Product: Norton Utilities 2.0
Publisher: Symantic
Available from:
MacLine
123 Westmead Road
Sutton
081-642-2222
Price: £115 + P&P & VAT

Value for money: ●●●●
Performance: ●●●●●
Documentation: ●●●●

information

Do The People Want Photo CD?

By Dan Gutman

Do people want to look at their snapshots of themselves on their television sets?

This is the fundamental question that will determine whether Kodak's new "Photo CD" system will revolutionize photography and computing or be this year's version of Quadraphonic sound.

Photo CD works like this: You shoot your roll of 35mm film just like you always did, but when you bring it in for processing you're given the option of getting your pictures stored on a compact disk in addition to paper prints.

After you pick up your pictures, you go home and pop the CD into a special player that is attached to your TV set. The player (about £300) looks like an ordinary CD player and will play standard audio CDs.

There are several advantages to keeping photos on a disk. Your pictures will never fade. The disks are easier to store than prints and negatives and there is no degradation in quality when you go from original to copy (Photo CD printers are also available).

But the real potential of Photo CD lies in the fact that your pictures are in digital form. It is suddenly possible to transfer your snapshots into a personal computer and manipulate them—crop 'em, tint 'em, retouch 'em, enhance 'em, combine 'em, sharpen 'em or blur 'em if you want to. Then you can print them or transmit them over phone lines. In this respect, Photo CD is like a word processor for images.

My first big question is—do everyday people have the interest or time to have such creative fun, and are we willing to pay for it? Certainly graphic artists and professional photographers will go crazy for this thing, but does Joe Sixpack want or need it?

This reminds me of the arguments for and against interactive television. Sure, it would be cool to press a button and choose the camera angles as you watch a football game, but how many couch potatoes will want to make the effort to do it?

Watching still pictures on a television set is not the same experience as flipping through a photo album. You can't hold the pictures in your hand and pass them around. There's all this TECHNOLOGY between you and your photos. I don't care how convenient Photo CD is, it's still not as easy as pulling out the old photo album.

The fact that something CAN be computerized doesn't necessarily mean it should be. It would be simpler and cheaper to publish books on disk rather than on paper. But reading off a computer screen is not as satisfying as turning the pages of a book.

In fact, it's an unpleasant experience and most people try to avoid reading long passages off the screen. They'd rather print the document out and read it from paper. Paper is a very underated medium, especially by the computer and electronics industries.

Marshall McLuhan once described TV as a "cool" medium. Photography is a warm media and I'm not convinced photography and TV mix like peanut butter and jelly.

Something else to consider is that there will be a saturation point at which people will no longer buy a new gizmo to hook up to their home entertainment systems. We all bought VCRs, video game systems and CD players. Many of us bought camcorders and laserdisks. At some point people will say, "Enough! I don't care HOW many VIDEO IN jacks they give me! I don't need it."

On the other hand, all indications point toward a digital revolution in all media. Music has gone digital, TV is going digital. Clocks, cars and kitchen appliances are going digital (whether we like it or not).

For more than 100 years, photography has been a chemical process. Silver halide crystals on the film exposed to light form images when bathed in chemicals. Now photography is becoming an electronic process, in which tiny computer chips respond to the light.

For the past few years, Sony, Canon and other Japanese companies have been hyping totally filmless electronic cameras that capture images on tiny floppy disks. They have been a failure, both because the quality has been far inferior to 35mm and because people aren't ready to give up thumbing through a batch of pictures.

But as the digital cameras improve, at some point people are going to give up film. When the quality of digital pictures matches the quality of 35mm film, and there is a way to inexpensively print hard copies of the pictures, I believe film will disappear

Kodak has been very smart, I think. They realize that photography — their entire reason to exist — is going digital. Naturally, the market for conventional film and photographic supplies is going to dry up.

They also realize that there are 250 million conventional cameras out there, and people are going to be reluctant to junk them. So they've created a bridge — a way to step into the digital world without having your equipment become obsolete.

They've enlisted the film producers to follow their lead. Fuji and Agfa have agreed on Kodak's standard. Even arch enemy Polaroid is working with Kodak on Photo CD technology.

Computer people are also on the bandwagon: Apple, IBM, Next, Adobe, Autodesk.

"We believe that Photo CD will have a major impact on the computer industry as it turns the promise of desktop color photo imaging from a wish to a reality," says Apple CEO John Sculley.

In the end, Photo CD may be successful whether people want to see their prints on TV or not.

Remember the LP? It was less than ten years ago that people were saying the CD would never replace it. Today, you can't find LPs in most record stores. Perhaps ten years from now, you won't be able to find film in camera stores.

MUG NEWS SERVICE, 1992

HOTLINE: Last week Kodak expanded the Photo CD program to include:

- The Kodak Picture Exchange — a global transmission network designed to provide access to millions of Photo CD images.
- The Kodak Photo CD Portfolion disc—allows the creation of programs with pictures, text, graphics, sound, and branching.
- The Kodak Professional Photo CD Image Library — an automated "jukebox" that stores thousands of images.
- Kodak PhotoEdge — software to edit images.
- Kodak Shoebox—software that helps search and retrieve images.
- Kodak Renaissance — a page layout program that incorporates Photo CD images.

The Liverpool Bulletin Board

Mike Dawson Makes His Phone Bill Explode.

After the small announcement in the last issue of our magazine I decided to try to log in to the new Liverpool bulletin board. I had some forewarning of the approach of the new bulletin board as I was given a copy of the special user software, First Class User. The catch when being given this was to be asked to be one of the Beta testers before the system went "live" to the rest of the world.

Unfortunately, there were problems with the new high speed modem that was purchased for the job and the BBS steadfastly refused to talk to me. It was after some considerable trouble shooting that the BBS has finally gone on line and be willing to talk to the likes of me. This just goes to show even the 'experts' have problems.

When the BBS finally did deign to talk to my humble and slow modem (2400 baud), the delights of the First Class User software for the Mac became apparent. The familiar single command line is banished and you are presented with a Mac window full of colour icons (Under System 7). Sections such as conference, messages and down load libraries are just a double click away. Navigating through the various sections is as easy as navigating through the Mac in general. So anyone who is disturbed by the 'techie' side of the black art of communications will feel at home. Down loading files is just as easy as double clicking on the item of interest. All the rest is done for you automatically. A dialogue box pops up to inform of the percentage complete status of the file transfer. One minor criticism is that it does not give an estimate of the remaining time of the file transfer as TABBS does. This means that I cannot do my usual trick of doing the washing up whilst the computer gets on with the job.

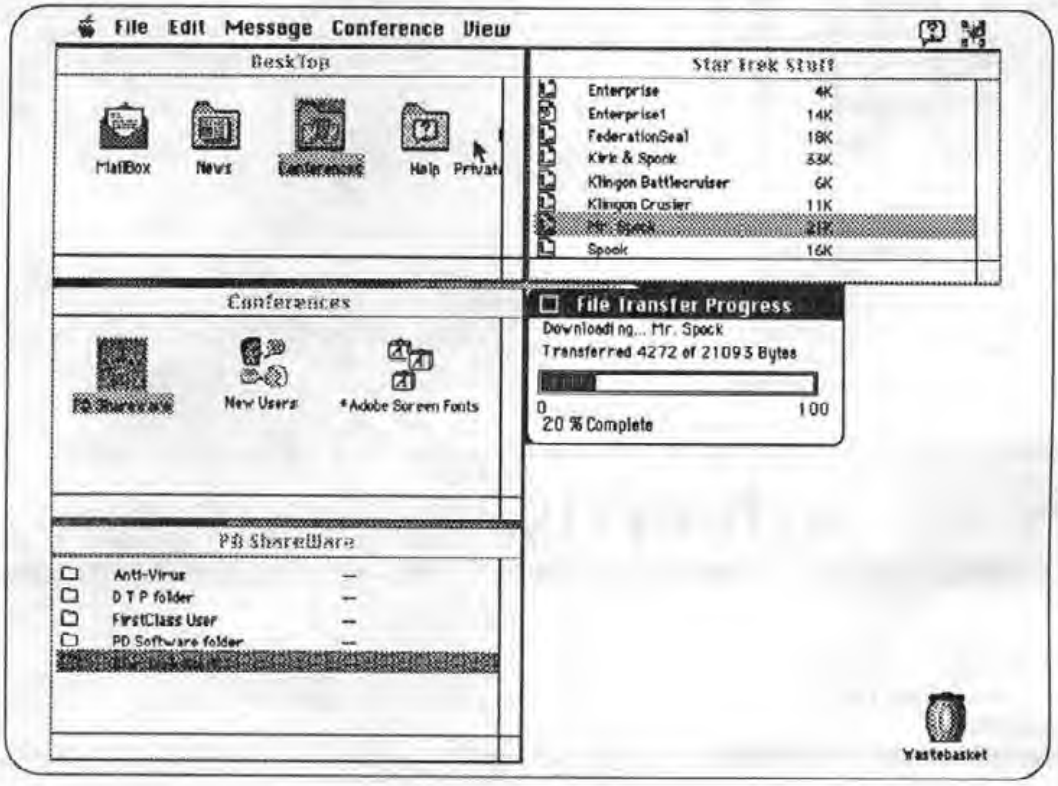
One Saturday night I managed to log in for the second time only to be interrupted by the administrator requesting a chat. So over the next 50 minutes we typed away our messages back and forward. There is nothing unremarkable in this except that I was also transferring a 256K byte file at the same time. The software will send files back and forth in the spare time between other service requests. So no more waiting for the exclusive demands of the file transfer, you can go and look at what else is interesting in the world of the Liverpool BBS.

If you don't have a copy of First Class User, which is most likely, it can be down loaded from the BBS. All you have to do is log on to the BBS and request the First Class User application from the down load section. The software is designated freeware so there is nothing to pay. That is except that there is a begging message in the application for $20 Canadian Dollars for assistance in the development of further facilities. The BBS will respond to the usual comms software so don't think that you are excluded at all from the fun. As an Apple2000 member, leave a message for the administrator and include your membership number. After a few days' wait you will be given full access to a CD ROM drive full of PD and shareware goodies. Just don't expect to see your phone bill at the same level again, or buy British Telecom shares quickly!

The Liverpool BBS will accept a baud rate of any standard between 1200 to 14400. If you value your bank account then the higher the speed the better. Join in the fun and get access to a wealth of programmes as well. Now is the time to get that modem or leave heavy hints to Santa. Comms has never been so easy. Although Apple][members are welcome unfortunately there is no Apple][computer software on the BBS at present.

Liverpool BBS Tel. 051-949 0307.
Available 24 Hours a day Speed 1200 to 14400 Baud

Note. The same telephone number also serves a FAX machine for Apple2000. There is nothing for you to do, as an automatic switch will route you to the BBS.



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CROSSWORD HELP

My 'Lexitrope Crossword Font' programme is damaged and I have no backup. Company is now non-existent. Can anyone help please?

'Phone Malcolm Gee .....

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Phone Peter Gamble .....

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'Phone Tim .....

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- CV Technologies RamFAST/SCSI v2.01 w/ 256K
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- Secure-It Kablit Security System

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Individual items available prior to CPU sale. Price includes all support software, manuals and cables. Price does not include shipping.

Call/Fax Shiro Wilde .....

WANTED

Manuals for Apple //e, DOS 3.3, Microsoft Softcard, Vergecourt Ramex 128k board, 80-col card, Epson printer interface. Any info for new user.

Contact Paul Bines,

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Call Josh(eves, answerphone) .....

For Sale (All Originals c/w manuals)

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Spare 60 Mbyte Tapes for above. A total of 18. Normally cost £15.86 each. The lot would cost £285.00 if purchased separately £120
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The BIDMUTHIN OFFICE SUITE

An integrated set of software designed to make the running of an office efficient, fast and reliable

For stand alone or networked computers

The Bidmuthin Office Suite perfectly complements a computerised accounts system

The Bidmuthin Office Suite performs virtually all general office administration tasks. Such tasks include writing and filing of letters and faxes, mail shots and standard letters; preparing quotations,invoicing (normal & pro-forma), maintaining price lists (trade & retail), creating technical specification sheets, logging phone calls,taking messages, arranging follow-ups, writing procedures,maintaining a networked diary, collecting information and so on. It allows information to be rapidly retrieved and disseminated. It even checks the bank's interest charges! In fact virtually every task except accounts.

Bidmuthin Office Suite is based on FileMaker Pro.

You need 1 FileMaker Pro application program per computer to run the Bidmuthin Office Suite. You only need 1 Bidmuthin Office Suite per location.

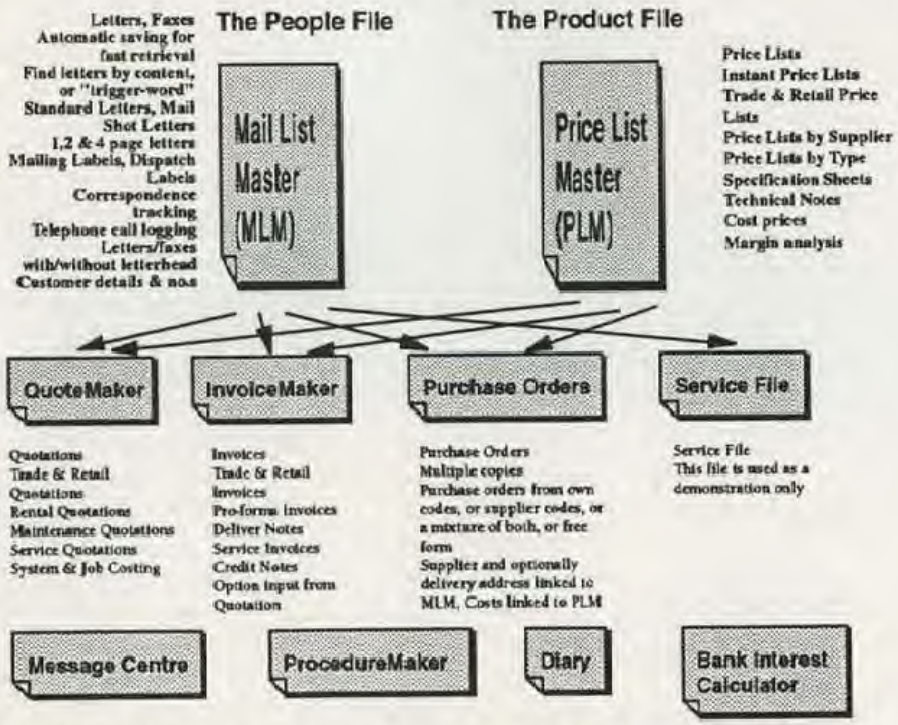
The Bidmuthin Office Suite runs happily on a single computer or on any FileMaker network. FileMaker comes with its own networking - it doesn't even need System 7 to network. If your computers share a LaserWriter via LocalTalk then FileMaker Pro & Bidmuthin Office Suite will network happily.

The Bidmuthin Office Suite requires FileMaker Pro V1.02 or later (FileMaker II won't work) hard disk & 2Mb of RAM available.

The Bidmuthin Office Suite also works on Windows PCs using FileMaker Pro for Windows.

Fully networked, The Bidmuthin Office Suite uses FileMaker Pro as the engine and the files in the suite to perform virtually all general office administration tasks. Just as important as entering and creating data is being able to rapidly retrieve the information - much faster than conventional word processing. This includes such things as being able to retrieve by 'trigger word" ("Who did enquire about a turquoise computer?). And almost as important for a greater than one-man office is the dissemination of information. FileMaker's networking enables this, but even so, you can't force people to read a screen - but you can press a button on the messages/to do file and everyone's outstanding messages/to do's will be printed out - grouped together one page (or more?) per person. It makes a good 'tickler', or 'follow-up' file too.

The Bidmuthin Office Suite will provide some examples and, we think, inspirations, to the expert FileMaker-ite. (Expert example: Purchase order: Enter buyers product code in Box A & suppliers product code is looked up into Box B. Enter suppliers product code in Box B & buyers product code is looked up into Box A. Yes, its a trick - but how is it done?)



FileMaker Pro can perform almost all database applications with the exception of full or integrated accounts.

And accounts programs can't do what FileMaker Pro does. A case of horses for courses.

A popular solution is to do the detailed invoicing on FileMaker where all the details can be kept and subsequently duplicated, amended copied etc. (try doing that on an accounts program and see what the Vatman says!). And then use an accounts program to track the money, do the aged debtors, nominal analyses and so on.

One of the usual problems with software is getting it customised and modified to work the way you want to. Whether it be the automatic printing of your letterhead - (and not Bidmuthin's), matching a layout to an existing form, inserting a lookup list of products or merely converting an existing database, or whatever.

Customising and modifying take time, but also more knowledge than is required to use the Bidmuthin Office Suite. Plus backup, support, training etc.

So we've solved that by this novel means - with the Bidmuthin Office Suite we are supplying a half day of customising or training or development or modifying or consultancy - your choice. PLUS a year's on-line telephone support. PLUS updates to the suite - you tell us what you want!

And as a special offer to all our regular customers - that's why you've got this bulletin - we're introducing the Bidmuthin Office Suite with a very special offer.

SPECIAL INTRODUCTORY OFFER

Bidmuthin Office Suite - value	£££
One half day's training / customising / modifying / consultancy / development - value	£125 - £175.00
One year's telephone support on FileMaker Pro - value	£115.00

All together...

Total Price : Special £245.00 + Vat

Plus money - back guarantee

If not delighted, and you haven't used the half day or telephone support then there's a full 100% refund.

NB. FileMaker Pro is extra. Must be obtained separately.

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